CRPL-F 255 PART B

FOR OFFICIAL DISTRIBUTION

PART B

SOLAR - GEOPHYSICAL DATA

ISSUED

NOVEMBER 1965

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY
(FORMERLY CENTRAL RADIO PROPAGATION LABORATORY)
BOULDER, COLORADO

CRPL-F 255
PART B

Issued

30 Nov. 1965

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
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CONTENTS

The descriptive text was republished in November 1964. Addenda have been given in the introduction to each of the CRPL-F Part B reports, December 1964 through October 1965.

169 Mc/s, Nançay, France:

Beginning with the chart for October 1965 the flux density for the storm centers is no longer given on an arbitrary scale. Therefore the indicated numbers are not comparable to those of preceding years.

Fleurs, Australia:

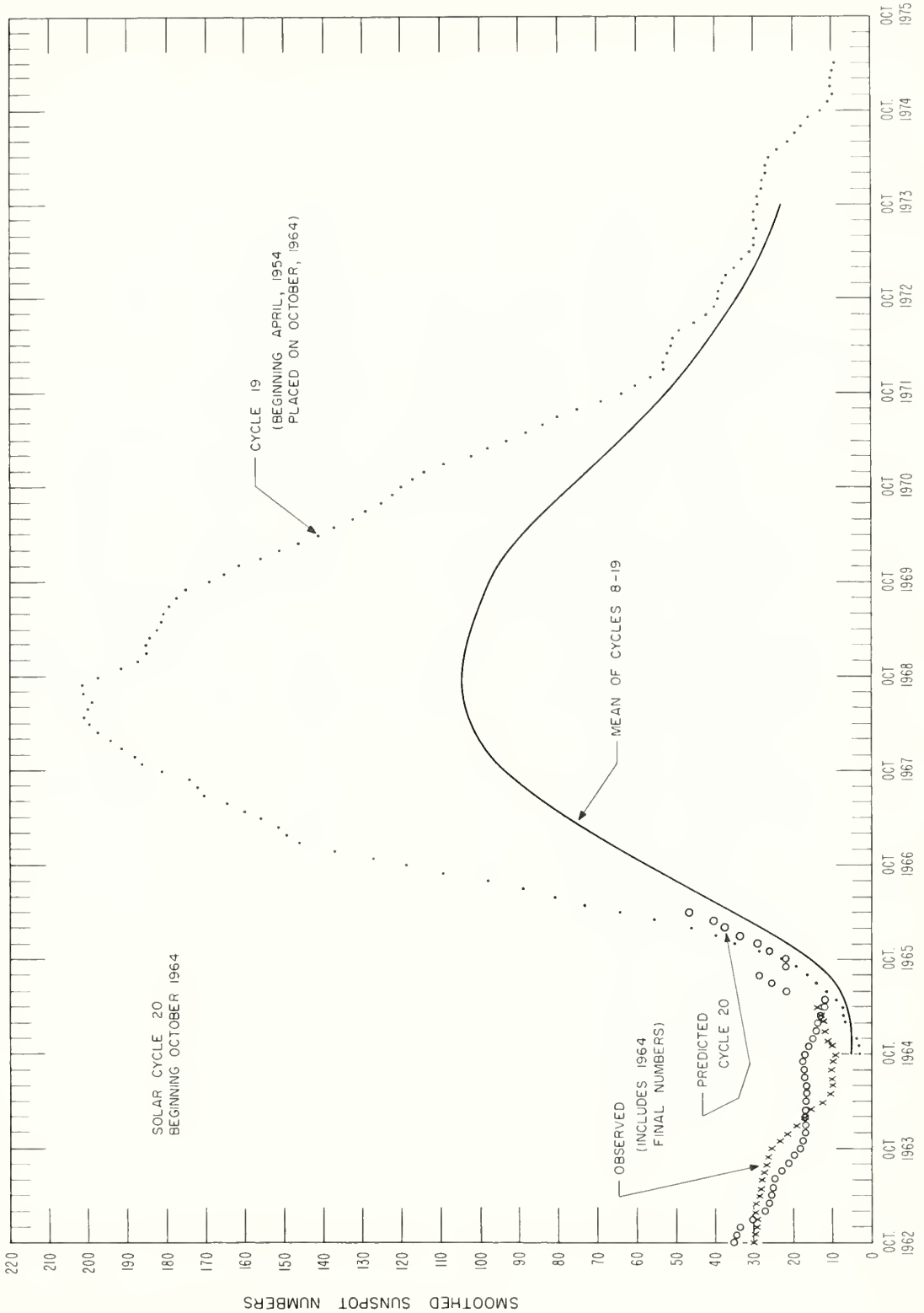
East-west solar scans from the 21 cm solar radio array of the University of Sydney are presented beginning with October 1965 data. The fan-beam has 2' of arc resolution. The two short horizontal lines drawn crossing the center line indicate the cold-sky level and the estimated quiet-sun level. The gain may differ from day to day. The curves have not been normalized to account for these gain variations other than the indication of the estimated quiet-sun level.

DAILY SOLAR INDICES

Sept. 1965	American Relative Sunspot Numbers R_A'
1	15
2	17
3	19
4	19
5	16
6	21
7	21
8	19
9	19
10	18
11	17
12	21
13	18
14	12
15	11
16	10
17	5
18	4
19	2
20	1
21	0
22	0
23	14
24	14
25	12
26	15
27	13
28	21
29	35
30	41
Mean:	15.0

Oct. 1965	Zürich Provisional Relative Sunspot Numbers R_Z	Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux S	Flux S_A
1	59	92.0*	92.2
2	73	93.2	93.3
3	65	96.0	96.1
4	74	97.5*	97.5
5	68	91.6	91.6
6	39	85.2	85.1
7	27	83.6	83.5
8	7	82.8	82.6
9	8	83.3	83.0
10	13	80.4	80.1
11	8	76.0	75.7
12	9	74.8	74.5
13	8	75.8	75.4
14	7	74.7	74.3
15	0	73.8	73.3
16	0	72.3	71.8
17	0	72.5	72.0
18	0	72.2	71.6
19	10	71.8	71.2
20	12	72.7	72.0
21	15	73.3	72.6
22	26	76.2	75.4
23	23	78.7	77.9
24	16	76.3	75.5
25	24	77.9	77.0
26	17	78.2	77.3
27	11	78.0	77.0
28	9	77.2	76.2
29	8	76.7	75.6
30	8	76.2	75.1
31	14	78.1	76.9
Mean:	21.2	79.6	79.1

* Corrected for bursts



PREDICTED AND OBSERVED SUNSPOT NUMBERS

OCTOBER 1965

OCT. 1965	LAT.	MCMATH PLAGE NUMBER	RETURN OF REGION	CALCIUM PLAGE DATA						SUNSPOT DATA		
				CMP VALUES		HISTORY	AGE (ROTATIONS)	DATE FIRST SEEN	DURATION (DAYS)	CMP VALUES		HISTORY
				AREA	INT					AREA	COUNT	
2.0	S19	8012	New	(1100)	(3.5)	b ⌒ ℓ	1	10/3	> 4	(100)	(16)	b ∧ ℓ
2.1	N26	8002	New	(200)	(1.0)	ℓ - d	1	9/25	6			
2.7	S25	8004	New	1200	2.5	ℓ - ℓ	1	≤ 9/27	>10	10	3	b - d
2.8	N23	8005	New	3900	3.5	ℓ ∧ ℓ	1	9/27	>10	270	87	ℓ ∧ ℓ
3.3	N31	8008	New	(100)	(1.0)	b - d	1	9/29	2			
3.3	N01	8013(1)	New	100	1.0	b - d	1	10/3	1			
4.0	N39	8015(1)	New	(200)	(1.5)	b - d	1	10/6	1			
4.7	N14	8010(1)	New	(200)	(1.5)	b - d	1	10/2	1			
5.9	N26	8006	7971	1200	2.0	ℓ ∧ ℓ	2	9/28	14			
6.3	N06	8016(1)	New	200	2.0	b - d	1	10/6	1			
6.6	S33	8009	New	500	3.0	ℓ - ℓ	1	9/30	13	(10)	(1)	b - d
7.8	N33	8014	New	(100)	(1.0)	b - d	1	10/4	2			
8.1	N09	8021	New	(200)	(2.0)	b - d	1	10/11	2			
8.4	S06	8020	New	(200)	(1.5)	b - d	1	10/11	2			
8.8	N13	8017(1)	New	(100)	(1.0)	b - d	1	10/6	1			
9.7	S23	8022	New	(200)	(1.5)	b - d	1	10/12	2			
11.9	N17	8025(1)	New	(300)	(2.0)	b - d	1	10/14	1			
13.8	N05	8028(1)	New	(100)	(2.0)	b - d	1	10/16	1			
14.2	N39	8030(1)	New	(100)	(2.0)	b - d	1	10/18	1			
14.6	N20	8024(1)	New	(300)	(1.0)	b - d	1	10/13	1			
14.8	S03	8023(1)	New	(200)	(1.0)	b - d	1	10/13	1			
15.4	N22	8018(2)	New	1000	3	ℓ ∧ ℓ	1	< 10/10	>10	(10)	(2)	ℓ - d
16.4	S06	8019	New	(100)	(1.5)	ℓ \ d	1	10/10	4			
19.1	N11	8026(1)	New	(100)	(1.5)	b - d	1	10/15	1			
20.1	N25	8027(3)	7989	(300)	(1.5)	ℓ - d	3	10/15	≥ 3			
20.1	N08	8031(1)	New	100	2.0	b - d	1	10/19	1			
20.1	N23	8032	New	300	3	b ∧ ℓ	1	10/19	8	10	4	b ∧ ℓ
21.1	N30	8036(1)	New	(200)	(1)	b - d	1	10/24	1			
22.0	N08	8044(1)	New	(100)	(1.0)	b - ℓ	1	10/28	1			
23.7	S27	8029	New	(500)	(1.5)	b ⌒ \ d	1	10/17	11			
23.7	N13	8038(1)	New	(200)	(1.5)	b - d	1	10/25	1			
23.8	S16	8045(1)	New	(100)	(1.5)	b - d	1	10/28	1			
25.2	N24	8046	New	(200)	(1.0)	b - d	1	10/28	2			
25.7	S16	8039(1)	New	100	1.5	b - d	1	10/25	1			
26.9	N28	8037	New	400	3.0	b - d	1	10/24	7	(10)	(1)	b - d
27.2	S09	8050	New	(200)	(3.0)	b - d	1	10/31	2			
27.5	S02	8048(1)	New	(100)	(2.0)	b - d	1	10/30	1			
28.2	N18	8033	New	300	2.0	b - d	1	≤ 10/23	≥ 8	(10)	(2)	b - d
28.4	N30	8040(1)	New	(100)	(1.0)	b - d	1	10/25	1			
29.1	S16	8034	8012	1300	2.0	ℓ - ℓ	2	< 10/23	>12	60	2	ℓ ∧ ℓ
29.8	S26	8041(4)	8004	300	2.0	ℓ - d	2	10/23	10			
30.3	N25	8035	8005	2200	3.0	ℓ ⌒ ℓ	2	10/23	>12			
31.1	S31	8047(4)	8004	200	1.0	ℓ - d	2	< 10/28	> 3			
31.2	N10	8042	New	600	2.0	ℓ ∧ ℓ	1	10/25	13	(20)	(13)	b - d

(1) These small and ephemeral plages were seen on the disk for only one day.
(2) Region 8018 is primarily a new plage, although it also contains some weak remnants of region 7983 of the previous rotation.
(3) Region 8027 contains remnants of part of region 7989.
(4) Regions 8041 and 8047 are parts of region 8004.

No calcium plage observations were secured at the McMath-Hulbert Observatory on October 1, 7, 8, 9, 20, 21, 22, 1965.

OCTOBER 1965

OCT. 1965	TIME MEAS. UT	LAT.	MER. DIST	TYPE	No.
1	1720	N20	E14	γ	15957
		N36	W36	βf	15960
2	1755	N21	E02	γ	15957
3	1845	N22	W11	βγ	15957
		S18	W27	βf	15961
4	1805	N20	W26	βp	15957
		S20	W39	βf	15961
		N23	E10	βf	15962
		S33	E25	β	15963
5	1845	N21	W40	βp	15957
		S20	W54	βf	15961
		S34	E14	αf	15963
7	0010	N21	W57	βp	15957
		S20	W70	βp	15961
7	1705	N21	W66	β	15957
8	1705	N20	W 80	αp	15957
9	1045	N18	E72	αp	15964
		N09	W75	αp	15965
10	No Obs.				
11	1900	N18	E47	αp	15964
13	0030	N18	E30	αp	15964
13	2220	N19	E18	αp	15964
14	No Spots				

OCT. 1965	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.
15	No Obs.				
16-18	No Spots				
19	No Obs.				
20	1440	N21	W08	βp	15966
21	2240	N21	W28	βp	15966
22	1930	N22	W38	βp	15966
23	1600	N22	W49	βp	15966
		S17	E67	αp	15967
24	1845	N22	W72	αp	15966
		S17	E52	αp	15967
		N29	E30	βf	15968
25	1550	S16	E40	αp	15967
		N21	E21	αf	15968
26	2135	S17	E23	βp	15967
27	1615	S17	E13	βp	15967
28	1830	S16	W03	αp	15967
29	1715	S16	W16	αp	15967
30	2335	S17	W32	αp	15967
31	1730	S17	W42	αp	15967

PROVISIONAL CORONAL LINE EMISSION INDICES

OCTOBER 1965

The Coronal Indices will be published at a later date because the microdensitometer is undergoing repairs.

SOLAR FLARES

OCTOBER 1965

OBSERVATORY	DATE OCT 1965	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX WIDTH Ha	MAX INT %	REMARKS
KAND	01	1140 E	1345		N21	E24	8005	125 D	2		1249	3.67	4.00			
WROC	01	1205 E	1235 D		N19	E20	8005	30 D	2	2	1227			4.60		FK
CAPS	01	1209	1239		N20	E25	8005	30	1	3	1229	2.10	2.30		170	FK
WEND	01	1216 E	1255 D		N20	E23	8005	39 D	1+				6.00			
SALO	01	1216 E	1314 D		N20	E19	8005	58 D	1		1232	2.63	2.87	1.70		
HUAN	01	1257 E	1317		N20	E24	8005		1-	P	1300	.30	.30			D
SACP	01	1707	1718	1710	N17	E17	8005		1-	C		.34	.34		19	
HUAN	01	1708	1714	1709	N18	E19	8005		1-	C	1709	.25	.25			E
LOCK	01	2024	2117	2042	N21	E15	8005	53	1	C	2042	2.10	2.10		20	IJ
HUAN	01	2026 E	□		N21	E18	8005		1+	P	2026	1.50	1.50			BCE
SACP	01	2026	2205	2037	N20	E16	8005	69	2	C		6.72	6.67		29	
KANZ	02	0740 E	0810		N20	E08	8005		1-							
WROC	02	1045 E	1220 D		N20	E10	8005	35 D	1	1	1115			2.90		CFHIJK
KANZ	02	1050 E	1118 D		N22	E11	8005		1-							H
WROC	02	1052	1102	1053	N19	E06	8005		1-	1	1053			2.90		CFHI
SALO	02	1220 E	1324 D		N22	E08	8005	64 D	1		1255	2.33	2.40	2.00		
CAPS	02	1246	1305		N22	E12	8005	19	1	3	1250	2.00	2.00		204	
MCMA	02	1249 E	1322		N22	E10	8005		1-	2 P	1251	1.20	1.30			BS
HUAN	02	1255 E	1258 D		N21	E09	8005		1-	P	1255	.87	.87			E
SACP	02	1311 E	1323	1314	N23	E09	8005		1-	C		.61	.61		17	
KANZ	02	1312 E	1325		N23	E10	8005	13 D	1							F
SACP	02	1404	1432	1420	N20	E06	8005		1-	C		1.10	1.08		19	
HUAN	02	1412	1433	1416	N21	E08	8005		1-	C	1416	.85	.85			E
MCMA	02	1413	1430	1415	N20	E06	8005		1-	2 C	1415	1.10	1.10			S
CAPS	02	1415	1425		N20	E10	8005		1-	3	1418	.40	.40		176	
SACP	02	1602	1743	1622	N19	E05	8005	101	1	C		5.02	4.92		24	
LOCK	02	1604	1707	1626	N22	E07	8005	63	1	C	1626	3.10	3.10		30	IJ
MCMA	02	1605	1720	1622	N18	E05	8005	75	1+	2 C	1622	3.50	3.50			S
SACP	02	1748	1835	1814	N19	E04	8005	47	1	C		2.12	2.08		22	
MCMA	02	1749	1831	1812	N18	E03	8005	42	1	2 C	1812	2.00	2.00			S
HUAN	02	1758 E	1837		N19	E05	8005	39 D	1	P	1814	1.67	1.67			E
SACP	02	2300	2345 D	2330	N20	W00	8005	45 D	1	C		3.20	3.14		17	
ISTA	03	0645	0705		N22	E01	8005	20	1							
WEND	03	0812	0829		N22	E01	8005		1-							
WEND	03	0840	0849		N21	W04	8005		1-							
SACP	03	1413	1422	1416	N21	W12	8005		1-	C		.34	.33		17	
SACP	03	1509	1556	1520 U	N25	W10	8005		1-	P		.17	.16		18	
SACP	03	1742	1756	1745	S22	W27	8012		1-	P		1.02	1.14		18	
MCMA	03	1956 E	2038 D		N20	W12	8005		1-	2 P	1957	.80	.80			E
SACP	03	2119 E	2119 D	2119 U	S32	E36	8009		1-	P		.34	.44		17	
LOCK	03	2155	2223	2204	N17	W14	8005		1-	C	2204	.70	.70		20	IJ
SACP	03	2200 E	2240 U	2206	N19	W13	8005	40 D	1	P		2.56	2.53		20	
SACP	03	2300 E	2305	2300	S32	E34	8009		1-	P		.42	.53		17	
ONDR	04	0715 E	0722		N19	W17	8005		1-	3	0717			1.80		CD
WEND	04	0845	0850		N21	W18	8005		1-							
ONDR	04	0935 E	1235		S24	W31	8012	180 D	2	2	0952			2.00		CEFHIJ
CAPS	04	0938	1008		S23	W28	8012	30	1	3	1003	2.50	3.30		170	
KANZ	04	0940 E	1014		S20	W29	8012	34 D	2							FH

SOLAR FLARES

OCTOBER 1965

OBSERVATORY	DATE OCT 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX PHASE	LOCATION APPROX LAT	LOCATION APPROX MER DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS AREA Sq. Deg.	CORR AREA Sq. Deg.	MAX WIDTH Hα	MAX INT	REMARKS
MONT	04	0941 E	1040 D		S21	W32	8012	59 D	1+							
WEND	04	0945 E	1108 D		S20	W28	8012	83 D	2+				12.00			
KANZ	04	0940 E	0945 D		S32	E28	8009		1-							D
WEND	04	0949	0957		S34	E28	8009		1-							
WEND	04	1002	1014		S34	E28	8009		1-							
WEND	04	1022	1032		N21	W28	8005		1-							
ONDR	04	1109 E	1123		N19	W21	8005		1-	3	1113			1.50		CDH
KAND	04	1220	1230		S31	E28	8009		1-							
WEND	04	1317	1325		N20	W13	8005		1-							
SACP	04	1318	1335	1322	N21	W17	8005		1-	C		.44	.44		18	
KANZ	04	1319	1325		N20	W17	8005		1-							D
HUAN	04	1320	1327	1322	N21	W18	8005		1-	C	1322	.20	.20			D
ONDR	04	1321 E	1333		S20	W32	8012		1-	3	1323			2.00		CD
SACP	04	1342	1353	1346	N21	W18	8005		1-	C		.43	.43		16	
HUAN	04	1345	1353	1348	N21	W18	8005		1-	C	1348	.25	.25			D
KANZ	04	1347 E	1351 D		N20	W17	8005		1-							D
KANZ	04	1347 E	1403 D		N22	W24	8005		1-							D
WEND	04	1350	1402		N22	W16	8005		1-							
ONDR	04	1357	1403		S20	W32	8012		1-	3						CDJ
SACP	04	1432	1443 D	1438	N21	W18	8005		1-	P		1.37	1.37		16	
HUAN	04	1434	1443	1437	N21	W19	8005		1-	C	1437	.25	.25			D
WEND	04	1445	1455		N20	W13	8005		1-							
HUAN	04	1446	1452	1449	N21	W19	8005		1-	C	1449	.33	.33			D
KANZ	04	1448 E	1457		N20	W17	8005	9 D	1							DH
SACP	04	1612	1621	1617	N21	W19	8005		1-	C		.42	.43		18	
MCMA	04	1613	1619 D	1614	N22	W20	8005		1-	1 P	1614	.30	.30			D
SACP	04	1645	1706	1656	N21	W22	8005		1-	C		1.54	1.56		17	
HUAN	04	1649 E	1656 D		N20	W20	8005		1-	P	1656	.75	.75			E
MCMA	04	1649 E	1703		N22	W20	8005		1-	1 P	1651	.50	.60			E
LOCK	04	1715	1732	1722	N22	W19	8005		1-	C	1722	.40	.40		20	
HUAN	04	1716	1729	1720	N21	W21	8005		1-	C	1720	.30	.30			D
MCMA	04	1716	1730	1718	N22	W16	8005		1-	1 C	1718	.20	.20			D
SACP	04	1716	1731	1720	N21	W20	8005		1-	C		.60	.60		17	
MCMA	04	1733	1820	1743	N21	W21	8005		1-	1 C	1743	1.00	1.10			F
SACP	04	1759 E	1832	1810	N22	W26	8005		1-	P		1.37	1.42		17	
HUAN	04	1805 E	1824		N22	W25	8005		1-	P	1805	.60	.60			E
LOCK	04	1846	1912	1852	N21	W19	8005		1-	C	1852	1.00	1.00		20	HJ
MCMA	04	1848	1905	1854	N22	W21	8005		1-	1 C	1854	.50	.60			DH
HUAN	04	1849	1911	1856	N21	W20	8005		1-	C	1856	.38	.38			D
SACP	04	1849	1915	1859	N21	W21	8005		1-	C		.85	.86		21	
MCMA	04	1917	1924	1919	N22	W21	8005		1-	1 P	1919	.50	.60			E
LOCK	04	2032	2040	2036	N21	W23	8005		1-	C	2063	.30	.30		20	
LOCK	04	2045	2102	2052	N22	W21	8005		1-	C	2052	.40	.40		30	
MCMA	04	2048	2054	2049	N22	W22	8005		1-	2 C	2049	.20	.20			D
SACP	04	2053 E	2056 D	2055	N20	W22	8005		1-	P		.77	.78		17	
LOCK	04	2201	2215	2207	N22	W20	8005		1-	C	2207	.30	.30		20	
LOCK	04	2345	2400	2350	N21	W21	8005		1-	C	2350	.40	.40		20	
KANZ	05	0729 E	0828		N23	E45		59 D	2							
WEND	05	0924	0938		N24	W39	8005		1-							
WEND	05	1041	1049		N22	W34	8005		1-							

SOLAR FLARES

OCTOBER 1965

OBSERVATORY	DATE OCT 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER. DIST.	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS AREA Sq. Deg.	CORR AREA Sq. Deg.	MAX WIDTH Ha	MAX INT °o	REMARKS
WEND	05	1118	1132		S17	W50	8012		1-							
SACP	05	1742	1818	1756	N20	W35	8005		1-	C		.85	.93		19	
HUAN	05	1751 E	1801		N22	W35	8005		1-	P	1754	.38	.42			E
LOCK	05	1751	1803	1755	N27	W27	8005		1-	C	1755	.30	.30		20	
MCMA	05	1752	1801	1753	N21	W37	8005		1-	1 C	1753	.40	.50			E
SACP	05	2006	2028	2015	N20	W37	8005		1-	C		1.38	1.52		16	
MCMA	05	2010	2025	2015	N21	W38	8005		1-	1 C	2015	.60	.70			EKL
LOCK	05	2012	2031	2018	N23	W35	8005		1-	C	2018	.30	.30		20	L
SACP	05	2106	2158	2123	N19	W38	8005		1-	C		.60	.66		18	
LOCK	05	2116	2138	2122	N17	W36	8005		1-	C	2122	.40	.40		20	
LOCK	05	2205	2215	2210	S18	W55	8012		1-	C	2210	.20	.30		20	
SACP	06	2322	2333	2326	N22	W63	8005		1-	C		.25	.40		17	
MONT	07	0805 E	0822 D		N23	W68	8005		1-							
WEND	07	1019	1030		N26	W70	8005		1-							
HUAN	07	1516 E	1526		S18	W90	8012		1-	P	1517	.20				CD
SACP	07	1600	1613	1607	N20	W69	8005		1-	C		.85	1.65		17	
HUAN	07	1601	1614	1607	N22	W73	8005		1-		1607	.30				D
WEND	08	0808	0820		N24	W77	8005		1-							
KAND	08	0850	0902		N21	W90	8005		1-							
KAND	08	0924	0958 D		N18	W90	8005		1-							
SACP	08	1603	1612	1607	N21	W84	8005		1-	C		.25			16	
SACP	08	1828	1846	1837	N21	W81	8005		1-	C		.34			15	
SACP	08	2046	2057	2048	N21	W83	8005		1-	C		.77			19	
HUAN	08	2048 E			N22	W85	8005		1-	P	2048	.33				CD
KAND	12	0730 E	0908 D		N21	E42	8018	98 D	2		0750	4.08	5.98			
ONDR	12	0741 E	0954 D		N20	E43	8018	133 D	2	2	0747			2.40		L
WROC	12	0830 E	0930		N19	E38	8018	60 D	1+	3						BFL
WROC	12	0830 E	0945		N19	E41	8018	75 D	1+	3	0840			2.80		BFL
MCMA	15	1918	1936	1919	N22	W04	8018		1-	3 C	1919	.60	.60			E
WEND	17	1235	1254		N14	W28	8018		1-							
KAND	19	1200 E	1231 D		S24	W90										
KANZ	19	1336 E	1358		N21	E06	8032		1-							DH
MCMA	19	1505	1513	1507	N08	E06	8031		1-	1 C	1507	.20	.20			D
SACP	19	2013	2040	2023	N21	E01	8032		1-	C		.59	.58		18	
LOCK	19	2013	2041	2025	N21	E01	8032		1-	C	2025	.40	.40		20	L
HUAN	19	2017	2038	2024	N22	E01	8032		1-	C	2024	.30	.30			D
MCMA	19	2035 E	2043 D		N22	E02	8032		1-	1 P	2043	.60	.60			EH
LOCK	19	2141	2209	2152	N21	E00	8032		1-	C	2152	.30	.30		20	
SACP	19	2142	2209	2147	N21	E01	8032		1-	C		.42	.41		14	
HUAN	19	2143 E	2145 D		N22	E01	8032		1-	P	2145	.30	.30			D
SACP	19	2228	2355 D	2248	N21	E01	8032		1-	C		.16	.16		12	
SACP	20	1507	1524	1511	N21	W10	8032		1-	C		.42	.42		14	
HUAN	20	1509	1526 D		N21	W09	8032		1-	P	1511	.20	.20			D

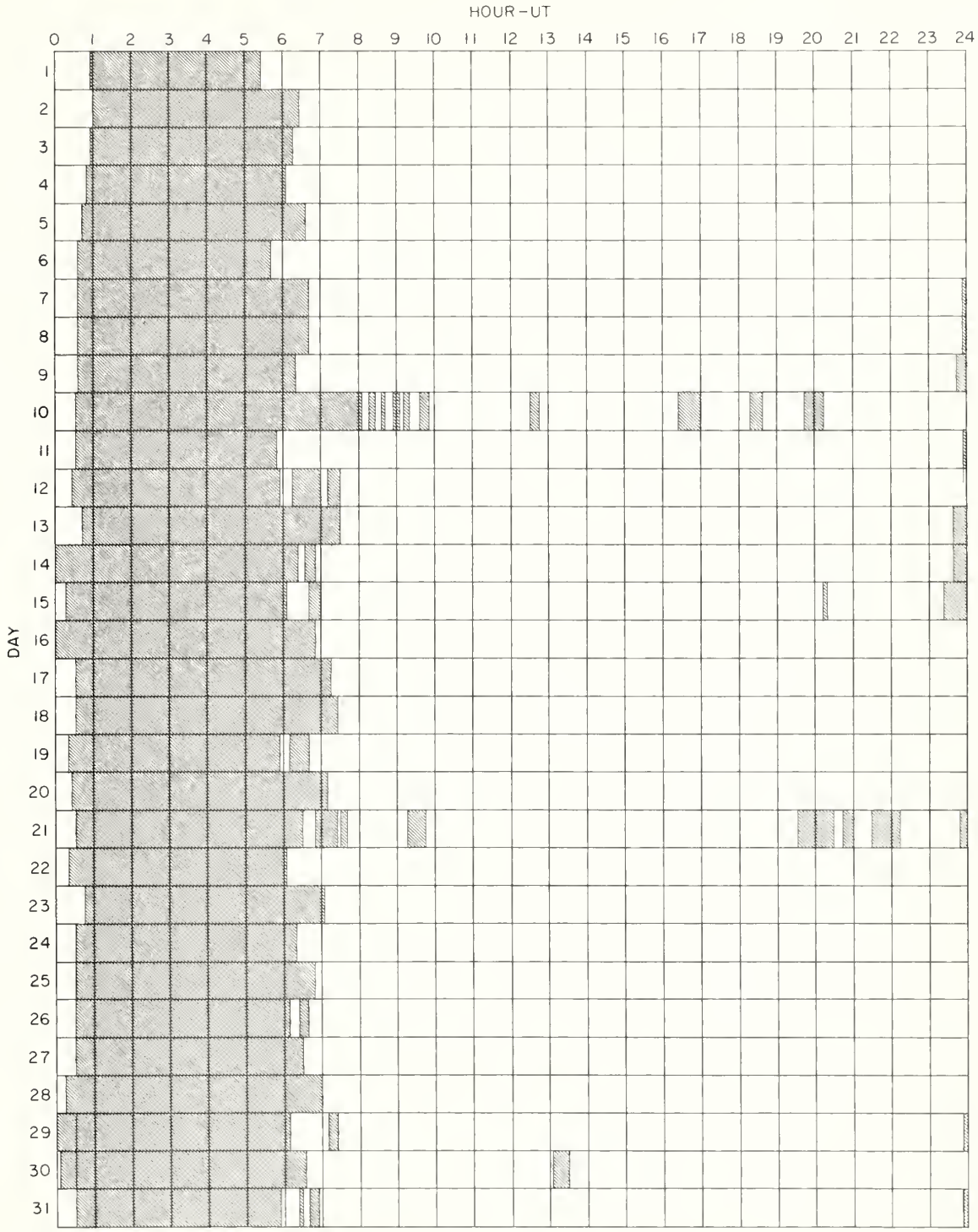
SOLAR FLARES

OCTOBER 1965

OBSERVATORY	DATE OCT 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS COND.	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS. AREA Sq. Deg	MEASUREMENTS CORR AREA Sq. Deg	MEASUREMENTS MAX WIDTH Ha	MEASUREMENTS MAX INT %	REMARKS
HUAN	20	1707	1717	1709	N21	W09	8032		1-	C	1709	.20	.20			D
WEND	22	0918 E	0933 D		N20	W32	8032	15 D	1				4.00			
KANZ	22	1330 E	1350		N20	W36	8032	20 D	1							F
KANZ	22	1354	1405		N20	W35	8032	11	1							H
SACP	22	1558	1612	1602	S17	E76	8034	14	1	C		.84	2.11		16	
LOCK	22	1705	1735	1715	S18	E79	8034	30	1	C	1715	1.20	3.00		20	
SACP	22	1707	1728	1715	S16	E75	8034	21	1	C		2.02	4.81		17	
SACP	22	2215	2258	2226	S15	E73	8034	43	1	C		1.52	3.33		17	
LOCK	22	2217	2305	2230	S17	E79	8034		1-	C	2230	.40	1.00		20	L
SACP	22	2349	2355 D	2355 U	S17	E74	8034	6 D	1	P		1.91	4.48		17	
LOCK	22	2352	0005	2359	S18	E79	8034		1-	C	2359	.40	1.00		20	L
HUAN	23	1453	1502	1455	N22	W49	8032		1-	C	1455	.50	.65			D
KANZ	23	1510 E	1530 D		N20	W46	8032		1-							
SACP	23	1511	1522	1516	N36	E81	8035		1-	C		.33			17	
LOCK	23	2233	2254	2240	N22	W52	8032		1-	C	2240	.30	.40		20	
SACP	23	2235	2309	2239	N20	W54	8032		1-	C		.84	1.14		19	
KANZ	24	1312 E	1343		N08	E85	8042	31 D	1							
KANZ	24	1400 E	1505		N29	E32	8037		1-							
ONDR	25	0936 E	0958	0951	N20	E35	8033		1-	3	0951			1.60		CDG
CAPS	25	0955	1005		N25	E56	8035		1-	3	1000	.30	.50		175	GH
KANZ	25	1000 E	1016 D		N26	E57	8035		1-							
ONDR	25	1339 E	1349		N24	W80	8032		1-	3	0940			1.40		CDG
LOCK	26	1607	1617	1610	N29	E08	8033		1-	C	1610	.20	.20		20	
LOCK	26	2003	2053	2020	N08	W50			1-	C	2020	.40	.50		20	
SACP	26	2031	2045	2035	S17	E25	8034		1-	C		1.18	1.25		16	
KAND	27	0846	0917	0902	S17	E18	8034	31	1		0902	1.60	2.29			
KAND	27	0917	0922 D		S18	E17	8034		1-							
HUAN	27	1126	1134	1128	S17	E14	8034		1-	C	1128	.30	.30			E
WEND	27	1130 E	1146		S17	E16	8034	16 D	1				3.00			
LOCK	27	1753	1801	1756	N27	W11	8037		1-	C	1756	.50	.50		20	
SACP	27	1754	1758	1756	S16	E14	8034		1-	C		.62	.62		16	
HUAN	27	1755	1800	1756	S18	E12	8034		1-	C	1756	.20	.20			D
HUAN	28	1430	1436	1434	S17	W02	8034		1-	C	1434	.25	.25			D
KANZ	28	1518 E	1528		S17	W02	8034		1-							
HUAN	28	1745	1802	1749	N27	E24	8035		1-	C	1749	.80	.85			E
SACP	29	1926	1933	1929	S21	W14	8034		1-	C		.21	.21		15	
KAND	31	0558 E	0728	0611	N33	E89	8051		□							

INTERVALS OF NO FLARE PATROL OBSERVATIONS
PROVISIONAL

OCTOBER 1965



Observatories included:

Capri-S (Sweden)	Huancayo	Kanzelhöhe	Monte Mario	Salonique
Catania	Istanboul	Lockheed	Ondrejov	Tortosa
Herstmonceux	Kandilli	McMath-Hulbert	Sacramento Peak	Wroclaw

SOLAR FLARES

JUNE 1965

OBSERVATORY	DATE JUNE 1965	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U.T	MEAS. AREA Sq. Deg	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX INT %	REMARKS
CATA	01	0600 E	0640 D	0629	S10	E36	7840		1-	2	0629	.12	.15		126	DGH
CATA	01	0800 E	1030 D	0940	S10	E36	7840		1-	2	0940	.62	.78		136	EH
ARCE	01	0812 E	0815 D		S09	E35	7840		1-	3	0812	.39	.48			
KAND	01	1152 E	1204		S10	E39	7840		1-							
MCMA	01	1300	1315		S12	E28	7840		1-	1 C	1305	.30	.30			EHT
HUAN	01	1630 E	1649 D		S11	E29	7840		1-	P	1630	.18	.21			DF
MCMA	01	1803	1830	1810	S12	E28	7840		1-	1 C	1810	.40	.50			EH
MCMA	01	2010	2035	2025	S12	E30	7840		1-	1 C	2025	.20	.20			DH
CATA	02	0635 E	1039 D	0637	S08	E24	7840		1-	3	0637	.42	.46		140	E
KAND	02	0825	0842		S10	E24	7840		1-							
ARCE	02	0910 E	1010 D		S09	E22	7840		1-	3	0910	1.01	1.11			
UCCL	02	1030	1049		S12	E22	7840		1-	3						D
UCCL	02	1059	1101		S12	E22	7840		1-	3						D
OTTA	02	1150	1207	1159	S11	E20	7840		1-	2 C	1159	.42	.42			H
UCCL	02	1157	1205		S12	E22	7840		1-	3						D
KAND	02	1218 E	1226		S10	E18	7840	8 D	1							
OTTA	02	1220	1313 D		S11	E19	7840		1-	1 C	1237	.36	.36			
UCCL	02	1222	1315		S12	E22	7840		1-	3						EK
KAND	02	1223	1247		S11	E19	7840	24	1+							
CLMX	02	1229	1253	1241	S12	E20	7840		1-	C	1241	.30	.30			
CLMX	02	1232	1247	1242	S12	E28	7840		1-	C	1242	.20	.20			
HUAN	02	1237	1244	1240	S11	E18	7840		1-	C	1240	.18	.20			DF
ONDR	02	1239 E	1251 D		S10	E21	7840		1-	2	1241			1.90		CK
CLMX	02	1259	1311	1305	S12	E20	7840		1-	C	1305	.20	.20			
KAND	02	1302	1318		S11	E19	7840	16	1							
CLMX	02	1335	1338	1337	S11	E29	7840		1-	C	1337	.50	.50			
HUAN	02	1335	1341	1337	S11	E18	7840		1-	C	1337	.25	.27			DF
OTTA	02	1336	1341	1338	S10	E19	7840		1-	1 C	1338	.96	.96			
CAPS	02	1337 E	1349 D		S10	E23	7840	12 D	1	2	1345	1.80	2.00		194	E
CAPE	02	1337	1356	1338	S08	E18	7840		1-	C	1338	1.20	1.30			J
CLMX	02	1404	1437		S12	E28	7840		1-	C	1417	.60	.60			
KANZ	02	1420 E	1428		S10	E22	7840		1-							DH
KANZ	02	1521 E	1525 D		S10	E22	7840		1-							D
OTTA	02	1622 E	1628 D		S28	W68	7841		1-	1 C	1625	.24	.45			
	02	1810	1815	NO FLARE	PATROL											
HALE	02	2014	2030	2017	S11	E16	7840		1-	2 C	2017	.60	.60			
	02	2130	2200	NO FLARE	PATROL											
KAND	03	0901	0918	0905	S12	E12	7840		1-							
CATA	03	0937 E	1032 D	0937	S09	E08	7840		1-	3	0937	.44	.45		138	E
KAND	03	1150	1154		S12	E09	7840		1-							
KAND	03	1154	1229		S10	E07	7840	35	1							
KAND	03	1158	1205		S11	E07	7840		1-							
OTTA	03	1217	1230 D		S27	W82	7841		1-	1 C	1230	.36				
MCMA	03	1217	1241	1230	S26	W85	7841		1-	2 C	1230	.30				D
KAND	03	1223	1230		S10	E03	7840		1-							
KAND	03	1226	1236		N33	W90		10	1							
KAND	03	1235	1250 D		S12	W17	7842		1-							
SACP	03	1415	1440	1419	S10	E02	7840		1-	C		.26	.25		18	
MCMA	03	1415	1441	1418	S10	E04	7840		1-	1 C	1418	.30	.30			E

SOLAR FLARES

JUNE 1965

OBSERVATORY	DATE JUNE 1965	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg	CORR AREA Sq. Deg	MAX. WIDTH Ha	MAX INT *0	REMARKS
SACP	03	1538	1555	1544	S12	W22	7842		1-	C		.35	.35		19	
HUAN	03	1540	1557	1545	S11	W20	7842		1-	C	1545	.15	.16			D
MCMA	03	1543	1610	1544	S12	W22	7842		1-	2 C	1544	.20	.20			DH
HALE	03	1736	1743	1740	S12	W22	7842		1-	2 C	1740	.30	.30			H
OTTA	03	1736	1801 D	1740	S11	W22	7842		1-	1 C	1740	.30	.30			H
OTTA	03			1751												
SACP	03	1744	1755	1748	S06	W04	7840		1-	C		.26	.25		18	
HALE	03	1746	1750	1747	S12	W22	7842		1-	3 C	1747	.20	.20			H
HALE	03	1755	1809	1802	S13	W23	7842		1-	3 C	1802	.20	.20			
SACP	03	1934	1943	1940	S12	E03	7840		1-	C		.39	.38		19	
HALE	03	1937	1941	1940	S12	E03	7840		1-	2 C	1940	.80	.80			
MCMA	03	2213	2221	2216	S12	W04	7840		1-	2 C	2216	.20	.20			DH
LOCK	03	2213	2224	2216	S12	W04	7840		1-	C	2216	.30	.30		10	H
SACP	03	2213	2226	2217	S11	W03	7840		1-	C		.52	.51		19	
LOCK	03	2306	2311	2308	S13	E01	7840		1-	C	2308	.40	.40		10	
LOCK	03	2344	2352	2346	S12	W04	7840		1-	C	2346	.30	.30		10	H
	04	0125	0150	NO FLARE	PATROL											
ATHN	04	0523 E	0537		S11	W29	7842		1-	3	0523	.80	.90			
BUCA	04	0624	0638		S11	W30	7842		1-	2			.60			
OTTA	04	1143	1154		S10	W10	7840		1-	1 C	1146	.36	.36			H
HALE	04	1915	1940	1926	S13	W37	7842		1-	3 C	1926	.10	.10			E
MCMA	04	1922	2205	1930	S10	W32	7842		1-	2 C	1930	.40	.40			EF
CAPE	05	1309 E	1329		N20	E90	7845		1-	2						
MCMA	05	1345	1440	1403	S12	W25	7840		1-	2 C	1403	.50	.60			E
SACP	05	1807	1834	1813	S12	W50	7842		1-	C		1.58	2.01		22	
CLMX	05	1813 E	1835		S09	W49	7842		1-	C	1816	.50	.60			
HALE	06	0039	0050	0042	S13	W56	7842		1-	2 C	0042	.30	.40			
HALE	06	0150	0210	0152	S13	W56	7842		1-	2 C	0152	.10	.10			D
TACH	06	0620	0650	0710	N20	E85	7845	30	1	C	0710	.60	5.10	3.80	75	A
IKOM	06	0630	0649		N20	E90	7845		1-	V						DO
CATA	06	0630	0730	0703	N18	E84	7845	60	2	3	0703	2.24	9.14		159	G
CAPE	06	0653 E	0733		N20	E85	7845	40 D	1	P	0654	.70				J
ATHN	06	0952 E	0954		N19	E83	7845		1-	2	0952	.20	1.40			
CAPS	06	1325	1345		S10	W57	7842		1-	3	1333	.40	.90		182	D
SACP	06	1327	1344	1331	S11	W61	7842		1-	C		.52	.79		18	
CAPE	06	1327	1347	1331	S12	W61	7842		1-	C	1331	.70	1.40			J
MCMA	06	1330	1342	1333	S12	W62	7842		1-	2 C	1333	.40	.90			S
HALE	06	1804	1812	1806	S12	W65	7842		1-	2 C	1806	.30	.50			
MCMA	06	1805	1830	1809	S12	W64	7842		1-	2 C	1809	.40	.90			S
HALE	06	2358	0009	0001	S13	W52	7842		1-	2 C	0001	.10	.10			F
KAND	07	0906	0918		S12	W50	7840		1-							
KAND	07	0906	0928		S14	W54	7840		1-							
WEND	07	0915 E	0932 D		S10	W42	7840		1-							
KAND	07	0931	0950		S14	W54	7840		1-							
KAND	07	0937	0946		N20	E62	7845	9	1							
BUCA	07	1033 E	1057 D		N12	W45		24 D	1	1			3.20			
KAND	07	1029	1100	1035	S14	W48	7840	31	2							

SOLAR FLARES

JUNE 1965

OBSERVATORY	DATE JUNE 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX PHASE	LOCATION APPROX. LAT	LOCATION APPROX. MER DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS COND	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS. AREA Sq Deg	MEASUREMENTS CORR AREA Sq Deg	MEASUREMENTS MAX. WIDTH Ha	MEASUREMENTS MAX INT *.	REMARKS
CAPE	07	1031	1103	1039	S11	W50	7840	32	1	C	1039	1.30	2.10			
KAND	07	1033	1100	1035	S11	W44	7840	27	1+							
KAND	07	1039 E	1054 D		S12	W49	7840		1-							
CAPS	07	1042 E	1106		S13	W48	7840	24 D	1	2	1045	2.00	3.00		185	F
WEND	07	1043 E	1100 D		S12	W46	7840	17 D	1+				5.00			
CAPF	07	1048 E	1107 D		S11	W47	7840	19 D	1	2	1049	3.00	4.23			H
SACP	07	1558	1607	1600	N23	E73	7847		1-	C		.35	.74		20	
SACP	07	2013	2028	2019	N21	E64	7847		1-	C		.26	.44		19	
SACP	07	2101	2110	2105	N27	W61	7848		1-	C		.17	.28		18	
HALE	07	2102	2111	2104	N27	W60	7848		1-	2 C	2104	.30	.50			
HALE	07	2124	2203	2131	S13	W85	7842		1-	1 C	2131	.10				
CULG	08	0044	0112	0054	N22	E64	7847	28	2	C	0054	2.40	6.00			
HALE	08	0045	0145	0055	N20	E65	7847		1-	2 C	0055	.80	1.40			
MANI	08	0047 E	0107	0054	N19	E65	7847		1-	1	0054	.33	.56			
CULG	08	0110	0127	0119	S12	W84	7842			C	0119	.60				G
HALE	08	0229	0355	0248	N21	E63	7847		1-	2 C	0248	1.00	1.60			FK
HALE	08			0318												
CULG	08	0230	0348	0251	N22	E65	7847	78	1	C	0255	1.40	3.50			G
CATA	08	0730 E	0851 D	0759	N25	W65	7848		1-	3	0759	.42	.84		138	E
KAND	08	0935	0941		S13	W90	7842		1-							
CAPE	08	0950	1030	0959	N21	E59	7847		1-	C	0959	.80	1.70			
BUCA	08	0951 E	1032 D		N23	E59	7847		1-	2			1.20			H
KANZ	08	1456 E	1458 D		N25	W70	7848		1-							D
MCMA	08	1517	1530		N23	E63	7847		1-	1 C	1520	.10	.20			E
CLMX	08	1518	1527		N19	E61	7847		1-	C	1518	.40	.60			
OTTA	08	1624	1711 D	1657	N21	E58	7847		1-	2 C	1657	.54	.80			
MCMA	08	1640	1710	1648	N23	E63	7847		1-	1 C	1700	.40	.80			EHK
CLMX	08	1656	1712	1701	N19	E61	7847		1-	C	1701	.50	.75			
HALE	08	1659 E	1724	1702	N20	E59	7847		1-	2 P	1702	.90	1.40			
HALE	08	1659 E	1724	1712	N25	W75	7848		1-	2 P	1712	.20	.50			
HALE	08	1728	1739	1733	N25	W80	7848		1-	2 C	1733	.10				
HALE	08	1943	2009	1947	N20	E52	7847		1-	1 C	1947	.60	.80			
HALE	08	2226	2234	2229	N22	W85	7848		1-	1 C	2229	.20				H
CULG	08	2238	2300 D	2250	N22	E58	7847	22 D	1	P	2250	2.20	4.40			
HALE	08	2238	2321	2244	N20	E52	7847	43	1	1 C	2244	2.20	3.10			FK
HALE	08			2250												
MCMA	08	2239	2242 D		N23	E60	7847	3 D	1	1 P	2242	1.20	2.40			S
IKOM	08	2244	2303 D		N22	E50	7847	19 D	1	V	2248	1.20	2.10	1.58	96	DH
HALE	08	2302	2322	2309	N25	W85	7848	20	1	1 C	2309	.80				
HALE	08	2324	2338	2327	N24	W85	7848		1-	1 C	2327	.30				
HALE	09	0004	0009	0007	N24	W85	7848		1-	1 C	0007	.20				
HALE	09	0010	0030	0017	N24	W85	7848		1-	1 C	0017	.70				
HALE	09	0114	0119	0117	N24	W85	7848		1-	1 C	0117	.10				
HALE	09	0123	0132	0125	N24	W85	7848		1-	1 C	0125	.20				
HALE	09	0146	0151	0148	N24	W85	7848		1-	1 C	0148	.20				
HALE	09	0159	0208	0201	N20	E42	7845		1-	1 C	0201	.50	.60			
HALE	09	0304	0320	0306	N24	W85	7848	16	1	1 C	0306	.70				
TACH	09	0306 E	0711 D		N26	W86	7848	245 D	1	C	0306	1.90	14.20	4.10	70	AE
HALE	09	0333	0344	0337	N24	W85	7848		1-	1 C	0337	.20				H

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HALE	09	0410	0416	0413	N27	W89	7848		1-	1 C	0413	.30				
CATA	09	0545 E	0615 D	0610	N24	W88	7848		1-	2	0610	.40	1.96		145	EG
CAPS	09	0600 E	0640 D		N22	W85	7848	40 D	1+	2	0617	2.50			215	
CULG	09	0559	0651 D	0638	N22	E50	7847	52 D	3	P	0638	10.20	16.32			FH
CAPS	09	0600 E	0715		N22	E45	7847	75 D	2+	2	0655	4.00	6.00		204	FK
CATA	09	0600	0735	0641	N22	E47	7847	95	2+	2	0641	5.82	9.18		259	I
TACH	09	0602	0711	0639	N21	E49	7847	69	2	C	0639	3.50	5.60	3.40	130	E
MANI	09	0605 E	0720	0638	N21	E50	7847	75 D	1	2	0638	2.00	2.60			
ATHN	09	0626 E	0654 D		N23	E44	7847	28 D	1+	2		2.80	4.20			
ABST	09	0630 E	0710 D	0638	N22	E48	7847	40 D	2	S	0638	7.20	6.30			CEJ
KIEV	09	0638	0701		N20	E49	7847	23	3	C	0641	20.00	33.00		95	BI
CAPE	09	0652 E	0727		N19	E45	7847	35 D	2	2	0654	6.00	9.00			
CAPE	09	0712 E	0750		N21	E50	7847	38 D	1	P	0712	2.80	4.50			
IZMI	09	0706 E	0712 D		N22	W85	7848		1-	P	0706	.90	3.25		50	DH
CAPE	09	0712 E	0724		N25	W88	7848		1-	P	0712	.80				J
MEUD	09	0713 E	0716 D		N26	W90	7848		1-							
KAND	09	0720 E	0750	0744	N27	W88	7848	30 D	1							
MEUD	09	0736 E	0801 D		N26	W90	7848	25 D	1-							
IZMI	09	0739	0819 D	0745	N22	W85	7848	40 D	1	P	0739	.90	3.25		50	DH
CAPE	09	0740	0808	0743	N25	W88	7848	28	1	C	0743	.60				J
CAPS	09	0745 E	0800 D		N22	W85	7848	15 D	1+	2	0750	1.00			225	
KAND	09	0747	0802	0751	N29	W88	7848	15	1							
KAND	09	0814	0817		N29	W88	7848		1-							
CAPE	09	0747 E	0816		S09	W85	7840	29 D	1	2						H
MEUD	09	0834 E	0911 D		N26	W90	7848	37 D	1							
KAND	09	0838 E	0903		N28	W88	7848	25 D	1							
KAND	09	0905	0910		N28	W88	7848	5	1							
CAPE	09	0908	0922	0910	N24	E55	7847		1-	C	0910	.60	1.20			E
KAND	09	0910	0922		N27	E61	7847	12	1							
KAND	09	0910	0919		N18	E51	7845		1-							
KAND	09	0914	0933	0923	N28	W90	7848	19	1							
KAND	09	0946	1041		N28	W90	7848		1-							
KAND	09	1206	1242		N26	W90	7848		1-							
KAND	09	1250	1256		N26	W90	7848		1-							
CAPS	09	1512	1539		N21	W90	7848		1-	3	1520	.20			170	D
LOCK	09	1745	1800	1750	N26	W89	7848		1-	C	1750	.30	.90		10	HJ
LOCK	09	1817	1825	1820	N26	W89	7848		1-	C	1820	.30	.90		10	HJ
HALE	09	1851	1857	1854	N23	W90	7848		1-	1 C	1854	.30				H
HALE	09	1907	1913	1909	N23	W90	7848		1-	1 C	1909	.20				
HALE	09	1934	1947	1942	N24	W90	7848		1-	1 C	1942	.40				
MCMA	09	1943	1955	1948	N25	W90	7848		1-	1 C						
LOCK	09	1946 E	1946 D	1946	N26	W89	7848		1-	C	1946	.30	1.50		10	HJ
HALE	09	1948	2003	1949	N24	W90	7848		1-	1 C	1949	.20				HK
HALE	09			1956												
LOCK	09	1957 E	1957 D	1957	N26	W89	7848		1-	C	1946	.30	1.50		10	HJ
HALE	09	2041	2046 D	2045	N23	W90	7848		1-	1 P	2045	.30				
LOCK	09	2115	2138	2124	N26	W89	7848		1-	C	2124	.30	1.50		10	HJ
MCMA	09	2119 E	2131	2122	N25	W90	7848		1-	2 P						
MCMA	09	2214	2227 D	2219	N25	W90	7848		1-	2 P						
LOCK	09	2215	2230	2220	N26	W89	7848		1-	C	2220	.30	1.50		10	HJ
LOCK	10	0015	0055	0025	N26	W89	7848		1-	C	0025	.30	1.50		10	HJ

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CAPE	10	0832	0855	0834	N22	E38	7847		1-	C	0834	1.00	1.30			
CAPE	10	0858	0924	0902	N22	E38	7847		1-	C	0902	1.40	1.90			
CAPS	10	0909 E	0935		N24	E40	7847	26 D	1	2	0911	1.70	2.30		166	
ARCE	10	0900	0935		S13	W90	7840	35	1	1	0915	.52	2.95			
KAND	10	0905	0952		S11	W90	7840	47	1							
KAND	10	1011	1027	1017	N24	W90	7848	16	1							
KAND	10	1034	1130		N24	W90	7848	56	1							
KAND	10	1138	1255		N27	W90	7848	17	1							
KAND	10	1152	115-		S11	W90	7840	7	1							
MCMA	10	1345	1409	1355	N22	E36	7847		1-	1 C	1355	.60	.80			S
MCMA	10	1425	1433	1426	N22	E30	7847		1-	2 C	1426	.20	.30			S
UCCL	10	1507 E	1512 D		N22	E38	7847		1-	4						
MCMA	10	1510	1602	1512	N24	E34	7847		1-	2 C	1512	.40	.60			
HALE	10	2005	2025	2009	N21	E27	7847		1-	1 C	2009	.50	.80			
LOCK	10	2043	2100	2051	N22	E32	7847		1-	C	2051	.20	.30		15	
LOCK	10	2228	2237	2231	N22	E15	7845		1-	C	2231	.20	.30		10	
HALE	10	2228	2240	2231	N22	E24	7847		1-	2 C	2231	.30	.80			
HALE	11	0054	0119	0058	N23	E31	7847		1-	1 C	0058	.40	.60			
LOCK	11	0055	0108	0058	N18	E25	7847		1-	C	0058	.30	.20		10	
HALE	11	0355	0415 D	0400	N22	E27	7847		1-	3 P	0400	.30	.30			
MCMA	11	1707	1715	1709	N24	E25	7847		1-	2 C	1709	.30	.40			
SACP	11	1707	1716	1710	N24	E22	7847		1-	C		.26	.27		15	
OTTA	11	1754	1800 D		N21	E13	7847		1-	1 C	1756	.08	.08			
LOCK	11	2001	2015	2008	N23	E20	7847		1-	C	2008	.20	.20		10	
MCMA	11	2005	2015	2008	N24	E23	7847		1-	2 C	2008	.50	.60			
HALE	11	2005	2018	2008	N22	E19	7847		1-	2 C	2008	.40	.40			
HUAN	11	2006	2012	2008	N23	E20	7847		1-	C	2008	.18	.21			
CATA	12	0637	0726	0706	N22	E10	7847		1-	4	0706	.26	1.37		148	SGH
CAPS	12	0701	0734		N22	E09	7847	33	1	3	0707	.80	2.00		161	FS
MCMA	12	1152	1215	1155	N23	E08	7847		1-	3 C	1159	.90	1.00			LSM
OTTA	12	1153	1213	1200	N22	E05	7847		1-	2 C	1200	1.01	1.01			H
CAPE	12	1154	1210	1157	N22	E06	7847		1-	C	1157	1.30	1.30			
KANZ	12	1556 E	1650		N20	E02	7847	54 D	1							GL
SACP	12	1746	1918	1804	N22	E01	7847	92	1	C		2.37	2.36		20	
HALE	12	1748	1815 D	1753	N22	E04	7847	27 D	1	3 P	1753	3.10	3.10			FK
HALE	12			1754												
HUAN	12	1748	1827	1753	N22	E03	7847		1-	C	1753	.93	.90			EHP
HUAN	12			1802												
MCMA	12	1748	1925	1758	N23	E03	7847	97	1	3 C	1758	2.00	2.20			FST
HALE	12	1840	1854 D	1848	N19	E00	7847		1-	1 P	1848	.50	.50			
HALE	12	1926	1937		N26	E06	7847		1-	1 P	1932	.20	.20			
	13	0130	0135	NO FLARE PATROL												
KODA	13	0257	0356	0306	N23	W02	7847	59	1+	V	0324	3.90	4.21			
TACH	13	0258 E	0506	0309	N24	E00	7847	128 D	2	C	0327	6.60	7.10	2.50	110	EH
TACH	13			0327												
TACH	13			0343												
MANI	13	0300 E	0430	0320	N21	W09	7847	90 D	1	2	0326	2.10	2.10			
HALE	13	2318	2343	2331	N21	W14	7847		1-	2 C	2331	.60	.60			

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LOCK	13	2320	0020	2335	N23	W13	7847		1-	C	2335	.50	.50		10	
HALE	13	2333	2341	2335	N22	W15	7847		1-	2 C	2335	.40	.40			
HALE	13	2352	0023	0007	N22	W14	7847		1-	1 C	0007	.50	.50			
MANI	13	2357 E	0020		N21	W15	7847		1-	2	2358	.40	.40			
SACP	14	0000 E	0020 U	0000 E	N22	W14	7847		1-	P		.52	.53		17	
CATA	14	1028 E	1057	1033	N20	W22	7847		1-	4	1033	1.22	1.39		155	D
SACP	14	1554	1606	1558	N23	W24	7847		1-	C		.43	.45		17	
MCMA	14	1554	1607	1555	N23	W24	7847		1-	2 C	1555	.30	.30			S
LOCK	14	1700	1915	1745	N17	E13			1-	C	1745	.20	.20		10	
LOCK	15	0020	0032	0025	N26	E53	7858		1-	C	0025	.20	.20		10	
ATHN	15	0744 E	0801 D		S21	E28	7860	17 D	1+	2						
BUCA	15	0735	0830		N22	W30	7847	55	1	2			4.80			GL
WEND	15	0736	0826		N23	W27	7847	50	2				9.00			
CATA	15	0737 E	0840 D	0744	N22	W30	7847	63 D	1	2	0744	2.60	3.17		170	EG
ZURI	15	0740 E	0817		N23	W30	7847	37 D	1							
CAPS	15	0740 E	0902		N22	W30	7847	82 D	1	3	0751	2.20	2.80		182	CFGHKL
KODA	15	0747 E	0807 D		N23	W28	7847		1-	P	0747	1.61	1.92			
MANI	15	0801	0820	0805	N21	W32	7847		1-	2	0805	.50	.55			
ARCE	15	0805 E	0828 D		N22	W32	7847		1-	2	0814	.92	1.17			
ARCE	15	0814 E	0849 D		N21	W28	7847		1-	2	0836	.69	.83			
KANZ	15	0830 E	0840 D		N20	W32	7847	10 D	1							BAGH
BUCA	15	0832 E	0912 D		N20	W33	7847	40 D	1	2			2.80			G
ARCE	15	0836	0932		N22	W32	7847		1-	2	0842	.56	.71			
UCCL	15	0857 E	0916 D		N23	W30	7847		□	2						BE
UCCL	15	1128 E	1155		N23	W30	7847		1-	3						D
CAPS	15	1140 E	1200		N22	W30	7847		1-	3	1145	1.30	1.60		157	CDG
OTTA	15	1157 E	1219		N22	W32	7847		1-	1 C	1157	.71	.78			B
OTTA	15	1212	1235 D		N23	W37	7847		1-	1 C	1224	.18	.20			
HALE	15	1929	1953	1932	N22	W39	7847		1-	2 C	1932	.20	.20			
HALE	15	2045 E	2107	2046	N09	W47	7862		1-	1 P	2046	.20	.20			
OTTA	16	1037	1044	1037	N07	W07			1-	1 C	1037	.12	.12			
OTTA	16	1125	1140 D		N31	W29	7847		1-	1 C	1130	.24	.27			F
SACP	16	1402	1409 D	1408	N22	W49	7847		1-	P		.35	.45		18	
OTTA	16	1402	1425	1408	N21	W47	7847		1-	1 C	1408	1.56	1.95			H
MCMA	16	1405	1415 D	1409	N23	W40	7847		1-	2 P	1409	.20	.40			
OTTA	16	1422	1428	1424	N32	W30	7847		1-	1 C	1424	.15	.17			
HALE	16	1633	1640	1635	N21	W58	7845		1-	3 P	1635	.20	.30			E
CATA	17	0605 E	0615 D	0608	S27	W11	7863		1-	5	0608	.48	.55		117	EGH
ARCE	17	0813 E	0850 D		S29	W09	7863		1-	2	0815	.72	.85			
MCMA	17	1131	1157	1139	N24	W58	7847	26	1	2 C	1139	1.00	2.00			SK
CAPE	17	1136	1158	1140	N25	W60	7847	22	1	C	1140	1.40	2.90			
MCMA	17	1255	1320	1258	S29	W11	7863		1-	2 C	1258	.40	.50			F
CAPS	17	1311 E	1312 D		S30	W10	7863		1-	1						
MCMA	17	1415	1445		S29	W10	7863		1-	2 C	1425	.30	.40			CH
MCMA	17	1515	1800 D		S29	W09	7863		1-	1 C	1730	.50	.60			DHK
SACP	17	1610	1633	1623	S28	W12	7863		1-	C		.26	.27		18	
HUAN	17	1616	1638	1623	S27	W15	7863		1-	C	1623	.15	.18			C

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LOCK	18	0110	0130 D	0120	N27	E89	7867		1-	C	0120	.20	.60		10	
KODA	18	0330 E	0340 D		S28	W22	7863		1-	P	0340	1.30	1.60			
CULG	18	0530	0542	0535	N24	W70	7847	12	1	C	0535	1.40	4.20			G
CAPS	18	0620	0633		S29	W20	7863		1-	3	0625	.80	1.00		163	D
CAPS	18	0650 E	0703		S29	W20	7863		1-	3	0653	1.30	1.60		157	D
CAPS	18	0728	0740 D		S29	W20	7863		1-	3	0730	1.50	1.80		161	D
ARCE	18	0806 E	0838 D		S29	W22	7863		1-	3	0806	1.31	1.66			
ARCE	18	0901 E	1000 D		S29	W22	7863		1-	3	0901	1.34	1.70			
WEND	18	1035 E	1110 D		N25	W65	7847	35 D	1+				8.00			
CAPE	18	1037	1052	1041	N26	W69	7847	15	1	C	1041	1.40				
CAPS	18	1037 E	1100		N20	W70	7847		1-	3	1044	.70	2.00			EGH
CAPE	18	1141	1214	1151	N23	W76	7847	33	1	C	1151	.70				
CAPS	18	1143	1217		N20	W70	7847	34	1	3	1152	.90	2.70		188	GJ
OTTA	18	1316 E	1329 D		N33	E79	7867		1-	1 C	1318	.12	.29			
MCMA	18	1430	1515	1452	N32	E80	7867		1-	2 C	1452	.40				EK
HUAN	18	1843	1856	1848	S28	W30	7863		1-	C	1848	.15	.20			D
HUAN	18	1906	1923	1914	S28	W30	7863		1-	C	1914	.15	.20			D
HUAN	18	2012	2028	2020	S28	W30	7863		1-	C	2020	.15	.20			D
CLMX	18	2015	2030 D	2018	S27	W28	7863		1-	C	2018	.30	.33			
MCMA	18	2015	2034		S29	W22	7863		1-	1 P	2021	.20	.30			DH
HALE	18	2133	2136	2134	N20	W90	7845		1-	1 C	2134	.10				
ARCE	19	0800 E	0847 D		S29	W36	7863	47 D	1	2	0841	1.41	2.03			
ARCE	19	0904			S29	W36	7863		1-	2	0904	.98	1.41			
LOCK	19	2012	2021	2017	N33	W01	7859		1-	C	2017	.20	.20		10	
LOCK	19	2315	2347	2325	N05	E42			1-	C	2325	.20	.20		10	
HALE	20	0155	0216	0202	N29	E56	7867		1-	2 C	0202	.40	.60			
HALE	20	0226	0233	0229	N29	E56	7867		1-	2 C	0229	.40	.60			
HALE	20	0231	0313	0235	S28	W46	7863		1-	2 C	0235	.60	.80			
CATA	20	0545 E	0630 D	0558	S28	W46	7863		1-	3	0558	.46	.76		141	E
KANZ	20	0747 E	0752 D		S26	W49	7863		1-							D
CAPE	20	0853	0906	0856	S27	W50	7863		1-	C	0856	.70	1.30			J
OTTA	20	1035	1041	1038	S28	W51	7863		1-	2 C	1038	.54	.76			
CAPE	20	1042	1101	1048	S27	W50	7863	19	1	C	1048	1.20	2.30			J
OTTA	20	1046	1053	1046	S29	W51	7863		1-	2 C	1046	1.08	1.51			
KANZ	20	1051 E	1054 D		S26	W50	7863		1-							D
OTTA	20	1059	1101	1100	N30	E52	7867		1-	2 C	1100	.16	.21			
OTTA	20	1114	1119	1115	S28	W52	7863		1-	1 C	1115	.36	.52			
OTTA	20	1250	1301	1252	S27	W51	7863		1-	2 C	1252	.42	.60			
MCMA	20	1252	1257 D	1254	S28	W53	7863		1-	1 P	1254	.50	1.00			E
CAPE	20	1252	1304	1255	S27	W52	7863		1-	C	1255	.90	1.70			J
SACP	20	1325	1336	1329	S28	W53	7863		1-	C		.35	.51		18	
CAPE	20	1325	1346	1330	S27	W52	7863	21	1	C	1330	1.10	2.10			J
OTTA	20	1327	1331	1329	S27	W53	7863		1-	2 C	1329	.84	1.19			
CAPS	20	1329	1335		S28	W46	7863		1-	3	1330	.80	1.20		157	
HUAN	20	1338 E	1407 D		S27	W55	7863		1-	P	1345	.15	.29			D
HALE	20	1724	1740	1731	S28	W59	7863		1-	1 C	1731	.40	.60			
HUAN	20	1819	1835	1827	S27	W56	7863		1-	C	1827	.15	.29			D
HUAN	20	1918	1938	1926	S27	W56	7863		1-	C	1926	.20	.38			D
LOCK	20	2059	2118	2105	S01	E07			1-	C	2105	.20	.20		10	

SOLAR FLARES

JUNE 1965

OBSERVATORY	DATE JUNE 1965	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS AREA Sq. Deg.	CORR AREA Sq. Deg.	MAX WIDTH Ho	MAX INT %	REMARKS
HUAN	20	2137	2216	2201	S27	W57	7863		1-	C	2201	.30	.57			D
HALE	20	2154	2206 D	2158	S28	W59	7863		1-	1 P	2158	.60	1.00			
CLMX	20	2154	2216	2158	S26	W56	7863		1-	C	2158	.60	.90			
LOCK	20	2240	2305	2246	S32	W55	7863		1-	C	2246	.20	.30		10	H
CULG	20	2242	2250	2246	S32	W54	7863		1-	C	2246	.20	.40			C
CATA	21	0548 E	0620 D	0553	S29	W60	7863		1-	2	0553	.42	.86		170	E
ONDR	21	0550 E	0558		S20	W60	7863		1-	3	0554			2.10		CDGH
ABST	21	0550 E	0558 D	0552	S27	W63	7863	8 D	1	S	0552	2.00	2.70			D
ONDR	21	0627	0704	0632	S20	W60	7863		1-	3	0632			2.00		JCDGHK
BUCA	21	0630 E	0639 D		S28	W70	7863		1-	2			1.20			
CAPE	21	0653 E	0718		S28	W62	7863		1-	P	0653	.70	1.70			J
HALE	21	1755	1810	1802	S27	W70	7863		1-	1 C	1802	.40	.80			
HALE	21	1848	1920	1853	S30	W70	7863		1-	1 C	1853	.20	.40			
	22	0400	0420	NO FLARE PATROL												
CATA	22	0640 E	0650 D	0645	S37	W03	7869		1-	4	0645	.96	1.25		123	E
CAPE	22	0805	0817	0810	S27	W77	7863		1-	C	0810	.60				J
KANZ	22	0807 E	0828 D		S26	W72	7863	21 D	1							D
CAPE	22	0832	0848	0834	S27	W77	7863		1-	C	0834	.40				J
ARCE	22	0835	0905 D		S29	W78	7863		1-	3	0835	.26	.83			
KANZ	22	0837 E	1041 D		S27	W71	7863	124 D	1+							E
WEND	22	0843	1050 D	0902	S26	W79	7863	127 D	1+				7.00			
CAPE	22	0917	1047	0926	S27	W78	7863	90	1+	C	0926	.90				J
ARCE	22	0920 E	1000 D		S29	W78	7863		1-	3	0925	.23	.74			
WEND	22	0903 E	0913 D		N29	E23	7867		1-							
WEND	22	0917 E	0931 D		N29	E23	7867		1-							
WEND	22	0948 E	1038 D		N19	E22	7867		1-							
MCMA	22	1106 E	1220		S29	W85	7863		1-	2 P	1107	.80				BE
CAPE	22	1135	1204	1139	S29	W80	7863		1-	C	1139	.60				J
CAPS	22	1204 E	1223		S28	W75	7863	19 D	1	3	1206	1.00	5.00		182	EG
KAND	22	1210 E	1235		S27	W90	7863	25 D	2							
CLMX	22	1217 E	1232 D		S25	W84	7863		1-	C	1217	.50	1.40			
KAND	22	1225 E	1315	1225	N34	E08	7870	50 D	1							
KAND	22	1237	1319	1255	S25	W88	7863	42	1							
CLMX	22	1240 E	1315		S25	W90	7863	35 D	1	C	1304	.70	3.50			
KAND	22	1256	1319	1300	S30	W90	7863		1-							
KANZ	22	1346	1654 D		S29	W74	7863	188 D	1+							
	22	2340	2400	NO FLARE PATROL												
	23	0000	0050	NO FLARE PATROL												
HALE	23	0103	0112	0105	S26	W90	7863		1-	1 C	0105	.10				
HALE	23	0129	0157	0139	S26	W90	7863		1-	1 C	0139	.30				H
HALE	23	0220	0250	0229	S26	W90	7863		1-	1 C	0229	.10				HK
HALE	23			0235												
HALE	23	0334 E	0358	0337	S26	W90	7863		1-	2 P	0337	.40				
HALE	23	0403	0428 D	0409	S26	W90	7863		1-	2 P	0409	.40				
HALE	23	0416	0419	0417	S29	W90	7863		1-	2 C	0417	.10				
KAND	23	0805	0822		S24	W90	7863		1-							
KAND	23	0821	1205 D	0833	S31	W90	7863	224 D	2-							
KAND	23	0830	0915		S24	W90	7863		1-							

SOLAR FLARES

JUNE 1965

OBSERVATORY	DATE JUNE 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER. DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS AREA Sq. Deg	MEASUREMENTS CORR AREA Sq. Deg	MEASUREMENTS MAX WIDTH Hα	MEASUREMENTS MAX INT °o	REMARKS
KAND	23	0839	1205 D		S28	W90	7863	206 D	2							
ARCE	23	0855 E	0910 D		S30	W90	7863		1-	2	0855	.23	1.31			
ARCE	23	0857 E	0910 D		S27	W90	7863	13 D	1	2	0857	.36	2.05			
KAND	23	0919	0943		S24	W90	7863		1-							
CAPF	23	0923 E	0937 D		S28	W90	7863		1-	2						
ARCE	23	0950 E	1000 D		S27	W90	7863	10 D	1	2	1000	.59	3.35			
KAND	23	0952	0958		S24	W90	7863		1-							
KAND	23	1005	1042		S23	W90	7863		1-							
CAPE	23	1032	1108	1050	S28	W90	7863	36	1	C	1050	.60				
KAND	23	1044	1101		S23	W90	7863		1-							
KAND	23	1113	1125		S23	W90	7863		1-							
KAND	23	1134	1142		S23	W90	7863		1-							
CAPF	23	1418 E	1427 D		S28	W90	7863		1-	2						
HALE	23	1840	1859	1850	S30	W90	7863		1-	2 C	1850	.20				
ARCE	24	0900 E	0930 D		N24	E90	7873	30 D	1	2	0920	.39	2.22			
KAND	24	0904	0906		N30	E90	7873		1-							
	24	2245	2250	NO FLARE	PATROL											
KAND	25	0842	0846	0844	N35	W67	7859		1-							
UCCL	25	0855 E	0900		N28	E85	7878		[ ]	3						D
ARCE	25	0910 E	0925 D		N32	E87	7878		1-	3	0915	.18	.83			
UCCL	25	0912	0917		N28	E85	7878		[ ]	3						D
KAND	25	0913	0924	0915	N40	W90	7857		1-							
KANZ	25	1018 E	1035 D		N30	E82	7878	17 D	1							D
WEND	25	1056	1111 D		N28	E76	7878	15 D	1				3.00			
OTTA	25	1101	1109	1107	N31	E85	7878		1-	2 C	1107	.18				
OTTA	25	1207	1220	1213	N29	E69	7873		1-	1 C	1213	.15	.28			
OTTA	25	1201	1250	1210	N31	E80	7878		1-	1 C	1210	.11				
OTTA	25			1244						1 C	1244	.24				
MCMA	25	1232	1248	1233	N31	E85	7878		1-	1 C	1233	.10				D
OTTA	25	1258	1347	1336	N29	E79	7878		1-	1 C	1336	.11	.25			
OTTA	25	1303	1349	1313	N31	E85	7878		1-	2 C	1313	.30	.83			
OTTA	25	1355	1431	1402	N30	E82	7878		1-	2 C	1402	.30	.75			
KANZ	25	1412	1433		N30	E80	7878		1-							D
MCMA	25	1416	1428	1419	N31	E85	7878		1-	1 C	1419	.20				D
SACP	25	2111	2120 U	2114	N30	W19	7867		1-	C		.57	.60		18	
	25	2350	2400	NO FLARE	PATROL											
	26	0120	0300	NO FLARE	PATROL											
ARCE	26	0845	0900		N33	E73	7878		1-	3	0845	.43	1.14			
MCMA	26	1746	1759		N24	E50	7873		1-	2 C	1750	.20	.40			D
OTTA	26	1747	1758 D	1750	N27	E52	7873		1-	2 C	1750	.12	.16			
MCMA	26	2015	2125		N24	E50	7873		1-	2 C	2030	.20	.40			
MCMA	26	2232	2241 D	2234	N23	E48	7873		1-	2 P	2234	.30	.60			D
LOCK	26	2232	2250	2237	N23	E46	7873		1-	C	2237	.30	.30		10	
SACP	26	2234	2242	2238	N24	E47	7873		1-	C		.35	.44		17	
LOCK	27	2105	2140	2112	N31	E37	7873		1-	C	2112	.10	.10		10	
ONDR	28	1017	1134		N32	E43	7878	77	2	2	1035			2.50		CFHI

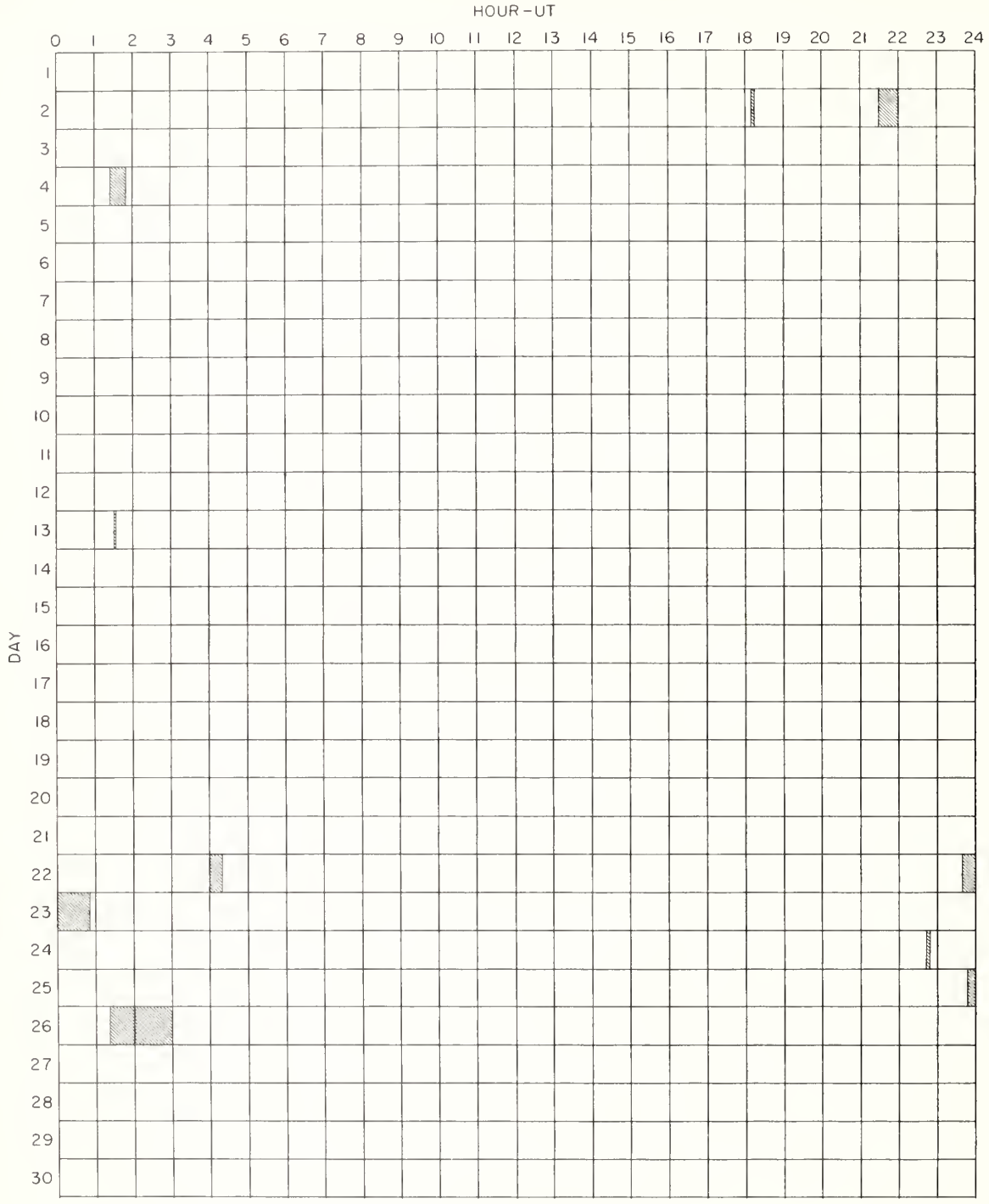
SOLAR FLARES

JUNE 1965

OBSERVATORY	DATE JUNE 1965	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX WIDTH Ha	MAX. INT. %	REMARKS
UCCL	28	1019	1105	1029	N30	E41	7878	46	2	3	1029	6.00	8.00			K
MEUD	28	1020	1055	1027	N30	E40	7878	35	1		1027	3.60	5.10			
CATA	28	1020 E	1130	1027	N33	E36	7878	70 D	2+	2	1027	3.76	5.62		246	I
LOCA	28	1020	1148	1025	N30	E41	7878	88	2	P	1129		5.00			
CAPS	28	1021 E	1123		N32	E40	7878	62 D	1+	3	1026	2.50	3.75		254	CFK
KHAR	28	1023 E	1052		N31	E37	7878	29 D	1	P	1035	3.40	4.80	1.80		CD
CAPF	28	1050 E	1122 D		N29	E40	7878	32 D	1	3	1054	3.00	4.23			
HERS	28	1055 E	1112 D	1055	N32	E44	7878		1-	2	1102	.60	1.10			E
MCMA	28	1107 E	1146		N29	E46	7878		1-	2 P	1108	1.00	1.40			BS
KAND	28	1218	1302	1235	N15	W90		44	1							
LOCK	28	1610	1700	1620	N32	E44	7878		1-	C	1620	.20	.20		10	
KAND	29	0820	0826		S18	E90			1-							
KAND	29	0820	0830		S11	E90			1-							
KAND	29	0846	0903		N04	E90			1-							
KAND	29	0916	0927		S18	E90			1-							
KAND	29	0917	0925		N06	E90			1-							
KANZ	29	1632 E	1642 D		N31	E29	7878	10 D	1							H
KANZ	29	1720 E	1722 D		N31	E29	7878	2 D	1							H
ONDR	30	0542	0608		N31	E06	7873		1-	3	0552			1.70		CEGH
LOCK	30	2016	2040	2024	N21	W06	7873		1-	C	2024	1.00	1.00		10	
MCMA	30	2022 E	2045 D		N23	W06	7873	23 D	1	1 P	2023	2.20	2.40			F

INTERVALS OF NO FLARE PATROL OBSERVATIONS

JUNE 1965



Observatories included:

Abastumani	Capri-S (Sweden)	Ikomasan	Locarno	Ondrejov	Uccle
Arcetri	Catania	Istanboul	Lockheed	Ottawa	Voroshilov
Athenes	Climax	Izmiran	Lvov	Sacramento Peak	Wendelstein
Bakou	Culgoora	Kandilli	Manila	Salonique	Wroclaw
Bucharest	Haleakala	Kanzelhöhe	McMath-Hulbert	Siberie	Zürich
Capetown	Herstmonceux	Kharkov	Meudon	Tachkent	Kiev-Ko
Capri-F (German)	Huancayo	Kodaikanal	Mitaka	Tortosa	

SOLAR FLARES

JULY 1965

OBSERVATORY	DATE JULY 1965	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ho	MAX INT %	REMARKS
	01	0500	0510	NO FLARE	PATROL											
ARCE	01	0946 E	1000 D		N28	E06	7878		1-	2	0946	.33	.37			
OTTA	01	1154	1214		N33	E32	7882		1-	1 C	1204	.12	.14			
OTTA	01	1156	1208		N29	W11	7873		1-	1 C	1201	.48	.54			
MCMA	01	1158	1204 D	1200	N29	W12	7873		1-	2 C	1200	.60	.60			S
OTTA	01	1212	1227	1218	N28	W11	7873		1-	1 C	1218	.12	.13			
OTTA	01	1334	1415	1345	N33	E32	7882		1-	1 C	1345	.60	.69			F
MCMA	01	1405	1438	1410	N34	E33	7882		1-	2 C	1410	.20	.30			D
SACP	01	1407	1420	1410	N33	E33	7882		1-	C		.35	.40		18	
UCCL	01	1412 E	1421 D		N32	E35	7882		1-	3						D
CLMX	01	1417	1428	1424	N32	E34	7882		1-	C	1424	.30	.30			
UCCL	01	1445	1448		N32	E35	7882		1-	3						E
MCMA	01	1545	1653	1551	N34	E32	7882		1-	2 C	1637	.40	.60			EK
MCMA	01			1637												
CAPS	01	1546	1600 D		N34	E26	7882		1-	3	1554	.20	.30		165	D
OTTA	01	1548	1603	1551	N34	E32	7882		1-	1 C	1551	.18	.20			
UCCL	01	1612 E	1706 D		N32	E35	7882		1-	2						DK
HUAN	01	1619 E	1654		N33	E32	7882		1-	P	1630	.18	.24			D
HUAN	01	1748	1757	1751	N33	E30	7882		1-	C	1751	.15	.20			E
LOCK	01	1804	1831	1816	N10	E21			1-	C	1816	.30	.30		20	
MCMA	01	1911	1932	1916	N28	W17	7873		1-	2 C	1916	.80	.90			S
HUAN	01	1916 E	1925 D		N28	W20	7873		1-	P						D
CATA	02	0650 E	0750 D	0651	N32	W19	7873	60 D	1	2	0651	2.10	2.47		136	D
MONT	02	0739 E	0810 D	0810	N20	W59	7880		1-			1.60				O
KAND	02	1226	1231		N31	E22	7882		1-							
CLMX	02	1501	1557		N24	E09	7884		1-	C	1544	.30	.30			
	03	0210	0225	NO FLARE	PATROL											
CAPE	03	0950 E	0959	0951	N32	E12	7882		1-		0951	1.00	1.20			
CAPE	03	1413	1425 D	1418	N25	W07	7884		1-		1418	1.20	1.30			
MCMA	03	1414	1420	1417	N25	W07	7884		1-	2 C	1417	1.00	1.10			E
CLMX	03	1414	1422	1416	N25	W04	7884		1-	C	1416	.70	.70			
HUAN	03	1415	1420	1417	N26	W17	7878		1-	C	1417	.35	.38			E
LOCK	04	1938	1951	1943	N31	W09	7882		1-	C	1943	.10	.10		20	
KAND	05	0856	0915		N34	W90	7873		1-							
OTTA	05	1033	1123 D	1111	S02	E30	7888		1-	2 C	1111	.18	.18			HH
ARCE	06	0800 E	0830 D		N19	E38	7886		1-	3	0820	1.14	1.49			
MANI	06	0813 E	0825	0815	N18	E33	7886		1-	3	0815	.30	.33			
KAND	06	0836	0841		N05	E90			1-							
ARCE	06	0900 E	0935 D		N19	E38	7886		1-	3	0925	.82	1.07			
CAPS	06	0928 E	1044		N19	E37	7886	76 D	1	3	0943	2.10	2.70		170	CKL
CATA	06	0930 E	1130 D	1045	N18	E37	7886		1-	3	1045	.98	1.23		157	D
OTTA	06	1026 E	1032 D		N18	E35	7886		1-	2 C	1032	.48	.52			
CAPS	06	1102	1150 D		N19	E37	7886		1-	3	1138	1.00	1.30		161	E
KANZ	06	1550 E	1610 D		N17	E31	7886		1-							DH
SACP	06	1551	1602 D	1559	N18	E32	7886		1-	P		.39	.42		19	
CLMX	06	1552	1609	1556	N18	E33	7886		1-	C	1556	.90	1.00			

SOLAR FLARES

JULY 1965

OBSERVATORY	DATE JULY 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX. PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS. AREA Sq. Deg.	MEASUREMENTS CORR. AREA Sq. Deg.	MEASUREMENTS MAX WIDTH Ha	MEASUREMENTS MAX INT. %	REMARKS
CAPF	06	1557 E	1612		N15	E33	7886	15 D	1	3	1603	2.00	2.44			
HUAN	06	1600 E	1603		N18	E32	7886		1-	P	1601	.15	.18			D
SACP	06	2012	2040	2026	N18	E30	7886		1-	C		.26	.28		18	
HUAN	06	2024	2048 D		N19	E31	7886		1-	P	2029	.20	.24			D
MCMA	06	2028	2130	2031	N18	E30	7886		1-	1 C	2031	.30	.40			DH
CLMX	06	2239	0016	2322	N18	E29	7886	97	1	C	2322	2.10	2.30			
LOCK	06	2301	0123	2315	N21	E25	7886	142	1	C	2315	2.30	2.30		20	HJL
SACP	06	2304	2325 D	2317	N19	E28	7886	21 D	1	P		3.55	3.71		21	
CULG	06	2305	2400	2318	N17	E28	7886	55	1+	C	2318	5.50	6.46			FJL
HALE	06	2316	2358	2329	N17	E28	7886		1-	1 C	2329	1.20	1.20			
CULG	07	0050	0118	0103	N21	E28	7886		1-	C	0103	.40	.46			L
CLMX	07	0103	0128 D	0106	N19	E27	7886		1-	C	0106	.50	.50			
CULG	07	0230	0304	0243	N22	E27	7886		1-	C	0243	.60	.69			J
TACH	07	0330	0430	0359	N19	E25	7886		1-	C	0359	1.10	1.30	2.60	90	EL
HALE	07	0346	0434	0351	N17	E24	7886		1-	2 C	0351	.60	.60			
HALE	07	0349	0419	0354	N18	E22	7886		1-	2 C	0354	.40	.40			
KODA	07	0350	0401	0356	N18	E28	7886		1-	V						
CATA	07	0630 E	1025 D	0724	N18	E24	7886		1-	3	0724	1.22	1.38		180	E
CAPS	07	0714	0730 D		N19	E23	7886		1-	3	0723	.70	.80		166	E
ARCE	07	0755 E	0820 D		N18	E23	7886		1-	2	0755	.98	1.09			
KAND	07	0835 E	0905		N19	E22	7886		1-							
ARCE	07	0840 E	0845 D		N17	E27	7886		1-	2	0845	.29	.33			
KAND	07	0923	0940		N19	E22	7886		1-							
ARCE	07	0950 E	0955 D		N18	E23	7886		1-	2	0950	1.05	1.17			
KANZ	07	1355 E	1410		N19	E18	7886		1-							DH
SACP	07	1449	1502	1454	N18	E20	7886		1-	C		.35	.35		17	
MANI	08	0025 E	0041 D	0035	N19	E13	7886		1-	2	0035	.50	.50			
CULG	08	0350	0407	0355	N19	E11	7886		1-	C	0355	1.60	1.68			
MANI	08	0352	0424	0400	N19	E11	7886		1-	2	0400	.60	.60			
BUCA	08	0704 E	0736 D		N19	E10	7886	32 D	2	2			5.20			
ATHN	08	0704 E	0740 D		N19	E10	7886	36 D	1	2	0711	2.10	2.40			
CAPS	08	0705 E	0759 D		N19	E10	7886	54 D	1+	3	0710	3.20	3.30		205	CFHI
ISTA	08	0710 E	0720		N19	E11	7886	10 D	1							
CATA	08	0715	0800	0719	N18	E12	7886		1-	4	0719	1.62	1.70		229	D
KANZ	08	0725 E	0745		N19	E10	7886	20 D	1+							DH
KANZ	08	0817 E	0850 D		N20	E10	7886	33 D	1+							EH
SACP	08	1625	1639	1633	N21	E73	7891		1-	C		.22	.45		18	
OTTA	08	1627	1640	1632	N21	E75	7891		1-	2 C	1632	.24	.51			
MCMA	08	1631	1638	1633	N21	E75	7891		1-	2 C	1633	.30				D
MCMA	08	2014	2050 D		N21	E08	7886		1-	1 P	2018	.20	.20			DH
LOCK	08	2019	2038	2026	N21	E07	7886		1-	C	2026	.60	.60		10	HL
SACP	08	2020	2037	2027	N22	E07	7886		1-	C		.31	.30		17	
CULG	09	0456	0510	0500	N16	W03	7886		1-	C	0500	.20	.21			
KAND	09	0500	0524		N21	W01	7886		1-							
KAND	09	0547	0555		N21	E69	7891	8	1+							
OTTA	09	1120	1138 D		N18	W07	7886		1-	1 C	1125	.48	.48			
ABST	10	0617 E	1006 D	0943	N19	W18	7886	229 D	1	C	0909	3.68	1.98		64	EJK

SOLAR FLARES

JULY 1965

OBSERVATORY	DATE JULY 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX. PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS. AREA Sq Deg	MEASUREMENTS CORR. AREA Sq Deg.	MEASUREMENTS MAX. WIDTH Ha	MEASUREMENTS MAX INT %	REMARKS
ARCE	10	0825 E	0835 D		N20	W16	7886		1-	2	0825	1.79	1.94			
KAND	10	0900 E	0912 D		N21	W19	7886		1-							
BUCA	10	0940	1004 D		N19	W17	7886	24 D	1+	2			3.60			J
CAPE	10	0945	1013	0950	N19	W19	7886	28	1		0950	1.80	2.00			
CAPS	10	0945	1041		N18	W16	7886	56	1+	3	1000	3.00	3.10		201	FKL
ARCE	10	0949 E	1007 D		N18	W16	7886	18 D	1	2	0953	3.07	3.31			
CATA	10	0950 E	1020 D	0955	N19	W19	7886		1-	3	0955	1.30	1.41		230	E
UCCL	10	0956 E	1028 D		N20	W19	7886	32 D	1	3	1023	4.50	5.00			F
MONT	10	0931 E	0945	0941	N20	E51	7891		1-			2.10				O
CAPE	10	1038	1050	1041	N20	E50	7891		1-		1041	1.20	1.90			
BUCA	10	1039	1045 D		N20	E50	7891	6 D	1	2			2.60			
CAPS	10	1039 E	1057		N20	E51	7891		1-	3	1043	.50	.80		170	DG
CATA	10	1043	1050 D	1044	N20	E50	7891		1-	3	1044	.68	1.06		148	E
BUCA	10	1116	1139 D		N25	W90	7882			2						
OTTA	10	1348	1422	1409	N19	W16	7886		1-	2 C	1409	.84	.84			FH
OTTA	10	1544	1601	1551	N18	W21	7886		1-	1 C	1551	.54	.54			
KANZ	10	1609	1640		N21	E45	7891		1-							D
CLMX	10	1835	1852 D		N21	W22	7886		1-	C	1842	.30	.30			
	11	0240	0245	NO FLARE	PATROL											
HALE	11	0434	0440 D	0437	N20	W29	7886		1-	1 P	0437	.60	.60			
ARCE	11	0840 E	0855 D		N19	W34	7886		1-	2	0850	.39	.48			
ARCE	11	0930 E	0950 D		N17	W33	7886		1-	2	0950	.62	.76			
KANZ	11	1322 E	1540 D		N18	W35	7886	138 D	1							E
HUAN	11	1346	1444		N18	W35	7886		1-	C	1405	.37	.46			D
OTTA	11	1414	1451		S21	W39			1-	1 C	1444	.41	.49			H
SACP	11	1510	1529	1518	N21	E33	7891		1-	C		.70	.76		19	
OTTA	11	1510	1534	1515	N21	E33	7891		1-	C	1515	.66	.71			H
LOCA	11	1510 E	1545		N20	E30	7891	35 D	1	S						
MCMA	11	1511	1532	1515	N21	E33	7891		1-	2 C	1515	.50	.60			EH
UCCL	11	1512 E	1515 D		N20	E34	7891		1-	3						E
CAPS	11	1512 E	1531		N20	E29	7891		1-	3	1515	.90	1.10		175	CGH
HUAN	11	1513 E	1526		N21	E35	7891		1-	P	1514	.25	.31			E
OTTA	11	1601	1621 D	1617	N19	W33	7886		1-	1 C	1617	.73	.80			
SACP	11	1602	1624	1617	N20	W34	7886		1-	C		.97	1.05		17	
MCMA	11	1605	1625	1617	N21	W34	7886		1-	2 C	1617	.70	.80			S
HUAN	11	1613	1622	1616	N21	W34	7886		1-	C	1617	.50	.62			D
SACP	11	1711	1725	1718	N19	W36	7886		1-	C		.35	.38		17	
MCMA	11	1713	1725	1717	N21	W34	7886		1-	2 C	1717	.20	.30			D
SACP	11	1910	1943	1925	N23	E32	7891		1-	C		1.15	1.24		17	
MCMA	11	1914	1955	1930	N22	E32	7891		1-	2 P	1930	1.00	1.20			E
HUAN	11	1935 E			N21	E35	7891		1-	P						E
LOCK	11	2330	2354	2342	N20	W35	7886		1-	C	2342	.50	.50		20	L
CULG	11	2333	2348	2339	N18	W35	7886		1-	C	2339	.60	.78			
LOCK	12	0004	0019	0010	N22	W35	7886		1-	C	0010	.20	.20		20	L
SACP	12	0005	0013	0008	N22	W34	7886		1-	C		.17	.19		18	
LOCK	12	0046	0135	0104	N22	W32	7886		1-	C	0104	.70	.70		20	
SACP	12	0047	0133	0107	N22	W35	7886		1-	C		1.59	1.74		18	
CULG	12	0051	0147	0105	N22	W35	7886	56	1	C	0105	2.20	2.86			GL
KANZ	12	0805 E	0835		N21	E23	7891	30 D	1							D

SOLAR FLARES

JULY 1965

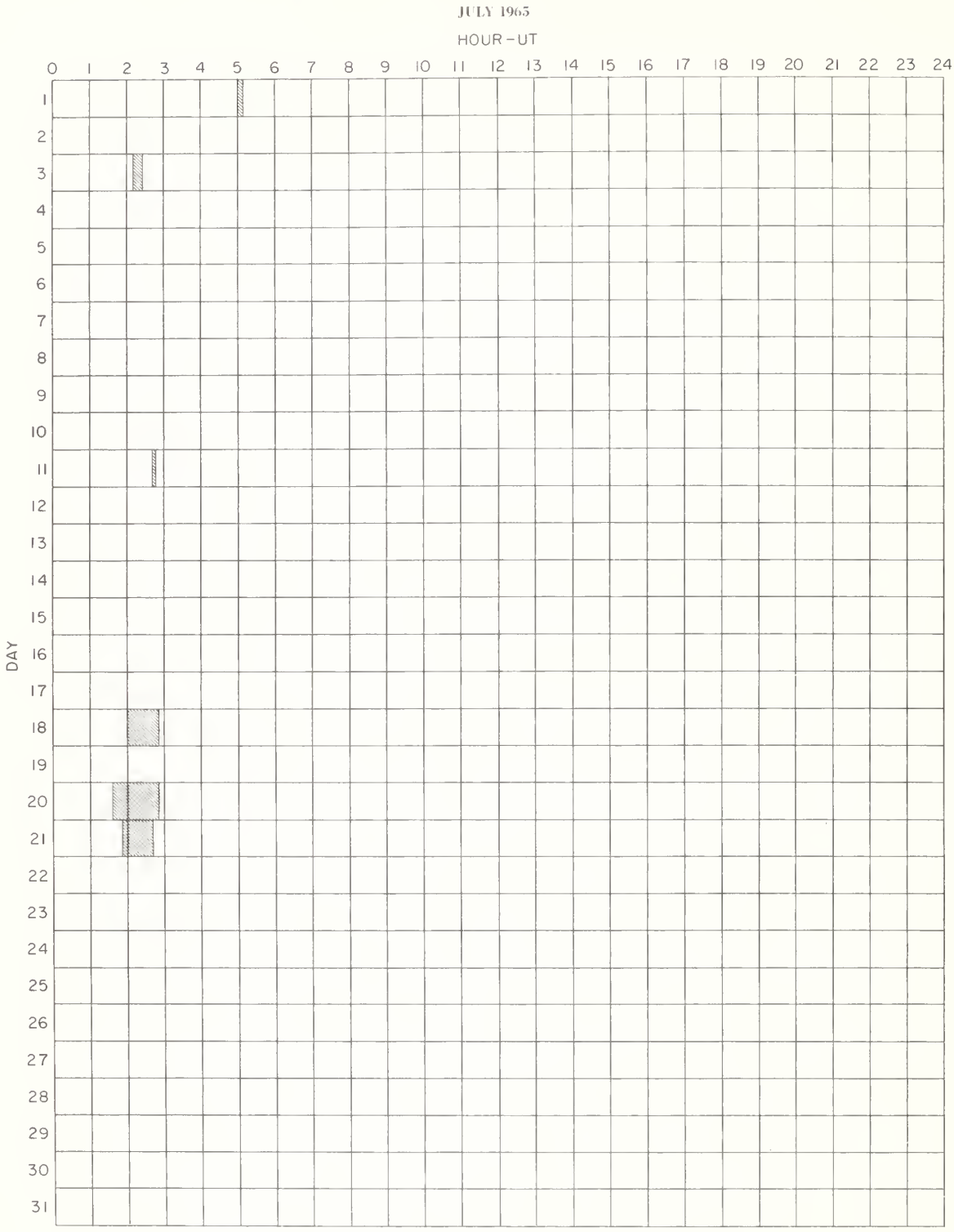
OBSERVATORY	DATE JULY 1965	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX PHASE	LOCATION APPROX LAT.	LOCATION APPROX MER DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS. AREA Sq Deg	MEASUREMENTS CORR AREA Sq Deg.	MEASUREMENTS MAX WIDTH He	MEASUREMENTS MAX. INT *.	REMARKS
KANZ	12	0920 E	0930		N18	W40	7886	10 D	1							D
KANZ	12	1040 E	1102		N20	W46	7886		1-							D
MONT	12	1145 E	1150 D	1150	N20	E43			1-			1.60				O
MCMA	12	1140	1218	1156	N22	E22	7891		1-	3 C	1156	.40	.40			EK
CAPS	12	1141	1215		N20	E23	7891		1-	3	1145	.90	1.00		200	G
BUCA	12	1151	1203 D		N21	E22	7891		1-	2			1.20			
CATA	12	1153 E	1223 D	1157	N22	E23	7891		1-	3	1157	.92	1.04		204	EGH
CAPS	12	1403	1418		N20	E23	7891		1-	3	1407	1.20	1.30		200	FG
MCMA	12	1405	1428	1407	N22	E21	7891		1-	2 C	1407	.50	.50			E
OTTA	12	1406 E	1426	1407	N22	E21	7891		1-	3 C	1407	.71	.72			F
SACP	12	1536	1550	1544	N19	W52	7886		1-	C		.17	.23		18	
OTTA	12	1540	1546	1544	N18	W53	7886		1-	2 C	1544	.24	.31			
MEUD	12	1542	1546		N22	W54	7886		1-	C	1545	.40	.70			
OTTA	12	1633	1638	1635	N23	E54	7896		1-	2 C	1635	.09	.12			
OTTA	13	1046	1220	1105	N19	W56	7886	94	1	2 C	1105	2.87	3.94			F
UCCL	13	1048	1111		N22	W60	7886	23	2	3	1105	4.00	6.00			F
MONT	13	1049 E	1105 D	1105	N20	W53	7886	16 D	1+			8.30				FO
CAPE	13	1050	1128	1059	N24	W56	7886	38	1		1059	1.60	2.90			
KIEV	13	1052	1140	1101	N25	W55	7886	48	1	C	1101	4.50	7.60		60	EI
CAPF	13	1054 E	1107 D		N25	W56	7886	13 D	1	3	1057	2.50	4.07			H
BUCA	13	1056 E	1125		N21	W55	7886	29 D	1	2			2.90			
CAPS	13	1057 E	1131		N20	W55	7886		1-	3	1100	1.00	1.70		210	C
KANZ	13	1058 E	1113 D		N19	E62		15 D	1							E
HALE	13	1945	2016	1948	N20	E03	7891		1-	2 C	1948	.70	.70			F
MCMA	13	1947	2016	1951	N21	E04	7891		1-	2 C	1951	.60	.60			E
CULG	14	0508 E	0540	0512	N22	W78	7886			P	0512	.20				G
LOCK	14	1810	2100	1915	S21	W09	7892		1-	C	1915	1.10	1.10		20	L
HALE	14	1825	1901	1842	S28	W08	7892		1-	2 C	1842	.50	.50			F
HALE	14	1829	1901	1839	S29	W02	7892		1-	2 C	1839	.20	.20			
CLMX	14	1906	1955		S29	W05	7892		1-	C	1933	.60	.70			
HALE	14	1921	1953	1923	S28	W10	7892		1-	1 C	1923	.20	.20			J
MCMA	14	2117	2127	2118	N24	W76	7886		1-	3 C	2118	.40				E
HUAN	14	2117	2132	2120	N23	W74	7886		1-	C	2120	.25				
LOCK	14	2140	2207 U	2146	N20	W09	7891		1-	C	2146	.70	.70		20	
MCMA	14	2142	2213	2148	N19	W10	7891		1-	3 C	2148	.80	.90			S
HUAN	14	2143	2202	2152	N18	W10	7891		1-	C	2152	.50	.53			E
HUAN	14	2203	2221	2211	N24	W75	7886		1-	C	2211	.60				
CULG	14	2203	2242	2213	N25	W76	7886			C	2213	1.40				G
MCMA	14	2213	2228	2214	N24	W78	7886		1-	2 C	2214	.40				E
HALE	15	0149	0154	0151	N18	W13	7891		1-	2 C	0151	.20	.20			F
ARCE	15	0857	0935 D		N21	W88	7886		1-	2	0902	.33	1.62			
HUAN	15	1207	1211 D		N21	E18	7896		1-	P	1210	.25	.27			E
MCMA	15	1208	1232	1209	N18	W19	7891		1-	3 C	1209	.30	.30			D
CAPS	15	1209 E	1245 D		N18	W15	7891		1-	3	1216	1.50	1.60		150	
CULG	15	2250	2259	2254	N27	E21	7896		1-	C	2253	.20	.23			CGL
HALE	17	0207	0224	0210	N19	W41	7891		1-	2 C	0210	.50	.60			F
HALE	17	0253	0315	0258	N20	W43	7891		1-	3 C	0258	.40	.50			

SOLAR FLARES

JULY 1965

OBSERVATORY	DATE JULY 1965	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U T	MEAS AREA Sq Deg	CORR AREA Sq Deg	MAX WIDTH Ha	MAX INT	REMARKS
LOCK	17	1808	1823	1814	N23	W19	7896		1-	C	1814	.30	.30		20	H
CLMX	17	1810	1820	1813	N27	W15	7896		1-	C	1813	.40	.40			
CLMX	17	2006	2015	2008	N21	W59	7891		1-	C	2008	.40	.50			
LOCK	17	2235	2310	2249	N21	W52	7891		1-	C	2249	.60	.80		20	JL
	18	0200	0250	NO FLARE	PATROL											
HUAN	18	1416	1424	1418	N27	E17	7899		1-	C	1418	.15	.17			E
SACP	18	1417	1430	1418	N27	E15	7899		1-	C		.21	.22		18	
CLMX	18	1420 E	1429		N27	E15	7899		1-	C	1420	.40	.40			
HALE	18	1936	1944	1938	N18	W62	7891		1-	1 C	1938	.30	.50			
HALE	18	2208	2250	2215	N22	W62	7891		1-	1 C	2215	.60	1.00			H
LOCK	18	2213	2245	2227	N11	W62	7891		1-	C	2227	.80	1.20		10	H
CLMX	18	2237 E	2308		N22	W61	7891		1-	C	2241	.50	.70			
KAND	19	0812	0915 D	0827	N17	W74	7891	63 D	1							
BUCA	19	0818 E	0905		N20	W70	7891	47 D	1	2						
ABST	19	0819 E	0854 D	0833	N21	W74	7891	35 D	1+	C	0833	5.50	8.90			
ARCE	19	0830 E	0905 D		N18	W71	7891	35 D	1	2	0835	2.06	4.83			
CAPS	19	0841 E	0915		N23	W70	7891	34 D	1	1	0846	1.00				B
	20	0135	0250	NO FLARE	PATROL											
	21	0150	0240	NO FLARE	PATROL											
OTTA	21	1420	1436	1429	N11	W45			1-	1 C	1429	.12	.15			
SACP	21	1422	1440	1430	N12	W44			1-	C		.17	.20		18	
LOCK	22	2127	2144	2132	S12	E05			1-	C	2132	.40	.40		20	
ARCE	24	0810 E	0840 D		S11	W41	7902		1-	2	0820	.52	.76			
OTTA	25	1339	1358 D	1346	N23	W77			1-	2 C	1346	.18	.39			
KAND	26	0852 E	0858 D		S27	W90			1-							
LOCK	28	0142	0156	0145	N22	W08	7913		1-	C	0145	.20	.20		10	H
CULG	28	0143	0149	0145	N22	W06	7913		1-	C	0145	.40	.42			CGH
ARCE	29	0935 E	0955 D		S20	E02	7923		1-	2	0935	.65	.73			
LOCK	31	2045	2057	2049	S13	E52	7929		1-	C	2049	.30	.40		20	H

INTERVALS OF NO FLARE PATROL OBSERVATIONS



Observatories included:

Abastumani
Arcetri
Athenes
Bakou
Bucharest
Capetown
Capri-F (German)
Capri-S (Swedish)
Catania
Climax
Culgoora
Haleakala
Herstmonceux
Huancayo
Ikomasan
Istanboul
Izmiran
Kandilli
Kanzelhöhe
Kharkov
Kiev-Ko
Kodaikanal
Locarno
Lockheed
Lvov
Manila
McMath-Hulbert
Meudon
Mitaka
Monte Mario
Ottawa
Ondrejov
Sacramento Peak
Salonique
Siberie
Tachkent
Tortosa
Uccle
Voroshilov
Wendelstein
Zürich

Average X-Ray Flux (1964)			
Date	44-60A	8-12A	0-8A
May 18	3.0×10^{-2}	$<30 \times 10^{-4}$	$<15 \times 10^{-4}$
19	2.1×10^{-2}	$<8 \times 10^{-4}$	$<4 \times 10^{-4}$
20	2.3×10^{-2}	$<2.5 \times 10^{-4}$	$<2 \times 10^{-4}$
21	2.4×10^{-2}	$<1.7 \times 10^{-4}$	1.3×10^{-4}
22	2.6×10^{-2}	1.3×10^{-4}	1.0×10^{-4}
23	2.6×10^{-2}	1.1×10^{-4}	1.0×10^{-4}
24	2.6×10^{-2}	$<1.1 \times 10^{-4}$	1.1×10^{-4}
25	2.6×10^{-2}	$<1.5 \times 10^{-4}$	1.1×10^{-4}
26	2.5×10^{-2}	$<1.7 \times 10^{-4}$	1.4×10^{-4}
27	2.0×10^{-2}	$<3 \times 10^{-4}$	$<2 \times 10^{-4}$
28	1.9×10^{-2}	$<8 \times 10^{-4}$	$<4 \times 10^{-4}$
29	2.4×10^{-2}	$<30 \times 10^{-4}$	$<11 \times 10^{-4}$

No outstanding events were observed in May 1964.

Observing Times for May 1964

18	1235	1251	22 (cont'd)	1113	1142	26	0024	0040
	1427	1442		1317	1333		0120	0142
	1624	1638		1458	1514		0212	0225
	1752	1810		1514	1530		0258	0317
	1940	1954		1641	1701		0441	0505
				1819	1845		0627	0707
19	0106	0122		2017	2032		1004	1031
	0251	0307		2128	2142		1151	1223
	0715	0749		2311	2329		1347	1407
	0919	0935		2358	0011		1534	1547
	1241	1302					1554	1604
	1419	1452	23	0057	0112		1710	1736
	1605	1648		0142	0158		1907	1923
	1802	1818		0247	0302		2249	2302
	1938	2002		0420	0435			
	2245	2300		0600	0618	27	0032	0049
				0754	0826		0312	0326
20	0115	0130		0937	0954		0456	0529
	0301	0316		1138	1152		0645	0717
	0353	0408		1319	1352		0827	0844
	0539	0553		1505	1535		1013	1042
	0716	0735		1652	1710		1211	1240
	0742	0759		1841	1853		1356	1428
	0928	0944		2033	2041		1542	1600
	1055	1112					1732	1743
	1241	1312	24	0110	0123		1919	1932
	1440	1513		0151	0207		2030	2041
	1623	1656		0240	0259		2211	2226
	1812	1825		0429	0500		2257	2312
	1959	2015		0615	0649			
	2254	2310		0801	0832	28	0000	0015
				1132	1202		0041	0059
21	0220	0243		1328	1400		0136	0202
	0311	0325		1515	1544		0316	0335
	0545	0621		1701	1719		0459	0540
	0733	0808		1849	1902		0646	0726
	0937	0950		2038	2048		0837	0853
	1104	1130					0950	1012
	1300	1321	25	0015	0030		1022	1052
	1446	1506		0119	0133		1220	1241
	1634	1650		0619	0657		1405	1438
	1822	1837		0807	0843		1552	1609
	2350	0002		1157	1212			
				1343	1358			
22	0410	0426		1527	1556	29	0144	0158
	0556	0630		1713	1727		0331	0344
	0744	0816		1847	1915			
	0928	1001		2156	2210			
				2340	2356			

The above values are revisions of data published in CRPL-F 241, Part B, issued September 1964. The April 1964 measurements published in CRPL-F 249, Part B, issued May 1965 were also revisions of the data published in CRPL-F 241, Part B.

IONOSPHERIC EFFECTS OF SOLAR FLARES

SHORT WAVE RADIO FADEOUTS — SUDDEN PHASE ANOMALIES
SUDDEN COSMIC NOISE ABSORPTION — SUDDEN ENHANCEMENTS OF SIGNAL
SUDDEN ENHANCEMENTS OF ATMOSPHERICS — SUDDEN FREQUENCY DEVIATIONS
SOLAR NOISE BURSTS AT 18 Mc/s

SEPTEMBER 1965

SEP 1965	UNIVERSAL TIME			TYPE SWF	IMPORTANCE						BUR	WIDE SPREAD INDEX	STATIONS	KNOWN FLARE
	START	END	MAX	IMP	ABS	SCNA	SEA	SPA	SES	SFD				
04	0315	0317									1	4	MA HA	
04	0317	0320									1	4	MA HA	
05	0900	0922	0907				2					1	TS	0856E
05	1000	1030	1010				2					1	TS	0941
06	1936	1940									1	4	HA BO (TRIPLE BURST)	
06	2001	2002									1	4	BO HA	
06	2157	2159									1	4	BO HA	2155
07	1610	1616	1611							002		1	BO(WWV10-0.2,WWV15-0.1)	1611E
08	0100	0102									1	4	MA HA	
08	1528	1532	1529							002		1	BO(WWV10-0.2,WWV15-0.1)	1525E
09	0057	0100									1	4	HA MA	
09	0217	0220									1	4	MA HA	
09	0248	0254									1	4	HA MA (DOUBLE BURST)	
09	1743	1745									1	4	HA BO	
09	1840	18450	1841							004		2	BO(WWV10-0.4,WWV15-0.2, KKE5-0.1,KKE4-0.1)	1838
09	2020	2022									1	4	BO HA	2021
09	2315	2317									1	4	HA BO	
10	1925	1927									1	4	BO HA	
12	1719	1724									2	5	BO HA	
12	1724	1725									1	1	BO	
12	2004	2006									1	4	BO HA	
12	2007	2009									1	4	BO HA	
13	0109	0110									1	4	HA MA	
22	2014	2130	2020						1			1	A3	
22	2016	2109	2021				1+					1	A3	
26	1319	1331	1321							002		1	BO(WWV10-0.2,WWV15-0.1)	
26	1502	1511	1507							003		1	BO(WWV10-0.3,WWV15-0.2)	1457
26	1652	1701	1655							002		1	BO(WWV10-0.2,WWV15-0.1)	1654
26	1712	1725	1716	G 1-								5	HU BE FM MC TR WS	1713
26	1713	1719	1715							007		2	BO(WWV10-0.7,WWV15-0.4, KKE5-0.3,KKE4-0.3)	
26	1714	1750	1720				1-					1	A3	
26	1928	1934	1929							004		2	BO(WWV10-0.4,WWV15-0.2, KKE5-0.2,KKE4-0.2)	
29	1922	1932	19220							042		2	BO(WWV-10-4.2,KKE4-2.2, WWV15-1.9,KKE5-1.2, KKE3-0.8)	1922
29	1925	2115	1935				3-					1	A3	
29	1927	1955	1930						1			1	A3	
30	1525	1630	1557	G 1+								5	MC BE BO FM HU TR WS	1513
30	1545	1550	1546							004		1	BO(KKE4-0.4)	
30	1922	2007	1932							010		2	BO(WWV10-1.0,WWV15-0.5, KKE5-0.3,KKE4-0.3)	1920
30	1925	2050	1930						1			3	A18 A3	
30	1925	2250	1945					76				5	BO(NPM26-76,NSS88-29, NAA17-22,NPG18-14, GBR16-11),MA	
30	1926	2013	1935	G 2								5	HU AO AN BE BO FM MC TR WS	
30	1930	2020	1938				3					5	A5 A3 BO HA	

TS = Tortosa, Spain
No SCNA, SEA, BURST reports received from McMath-Hulbert

RIOMETER EVENTS

SEPTEMBER 1965

GREAT WHALE RIVER

30 Mc/s

SEPT. 1965	START UT	END UT	MAX UT	MAX. ABSORP. db, (tenths)	NO. OF PEAKS	SEPT. 1965	START UT	END UT	MAX. UT	MAX. ABSORP. db, (tenths)	NO. OF PEAKS
1	0358	0923	0708	25	3	16	1924	2100	1941	6	2
2	0010	1620	0440	26	3	17	0200	1928	1610	30	8
4	1144	1417	1251	11	1	18	0330	0750	0409	30	3
5	0314	0834	0403	17	4	19	0256	2026	0317	42	6
5	1156	1450	1313	21	1	21	0040	0536	0121	25	4
5	2033	2214	2130	7	1	21	2102	2140	2107	34	1
6	0310	0502	0401	10	1	22	0244	0940	0623	15	4
6	1604	2150	1715	12	4	22	1340	1620	1511	25	4
7	0335	0740	0412	5	2	24	0442	0800	0445	45	3
7	2214	2314	2229	10	1	25	0126	0536	0454	14	4
12	0245	0510	0249	10	3	26	0132	2318	1329	43	6
13	0245	0425	0306	26	3	27	0018	0354	0027	21	3
15	0451	0855	0459	13	6	28	0048	1825	0049	39	8
16	0020	0343	0239	21	5	28	2137	2217	2156	6	1
16	0748	1520	1311	29	6	29	0340	2150	0441	16	14
						30	0230	0904	0335	23	5

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

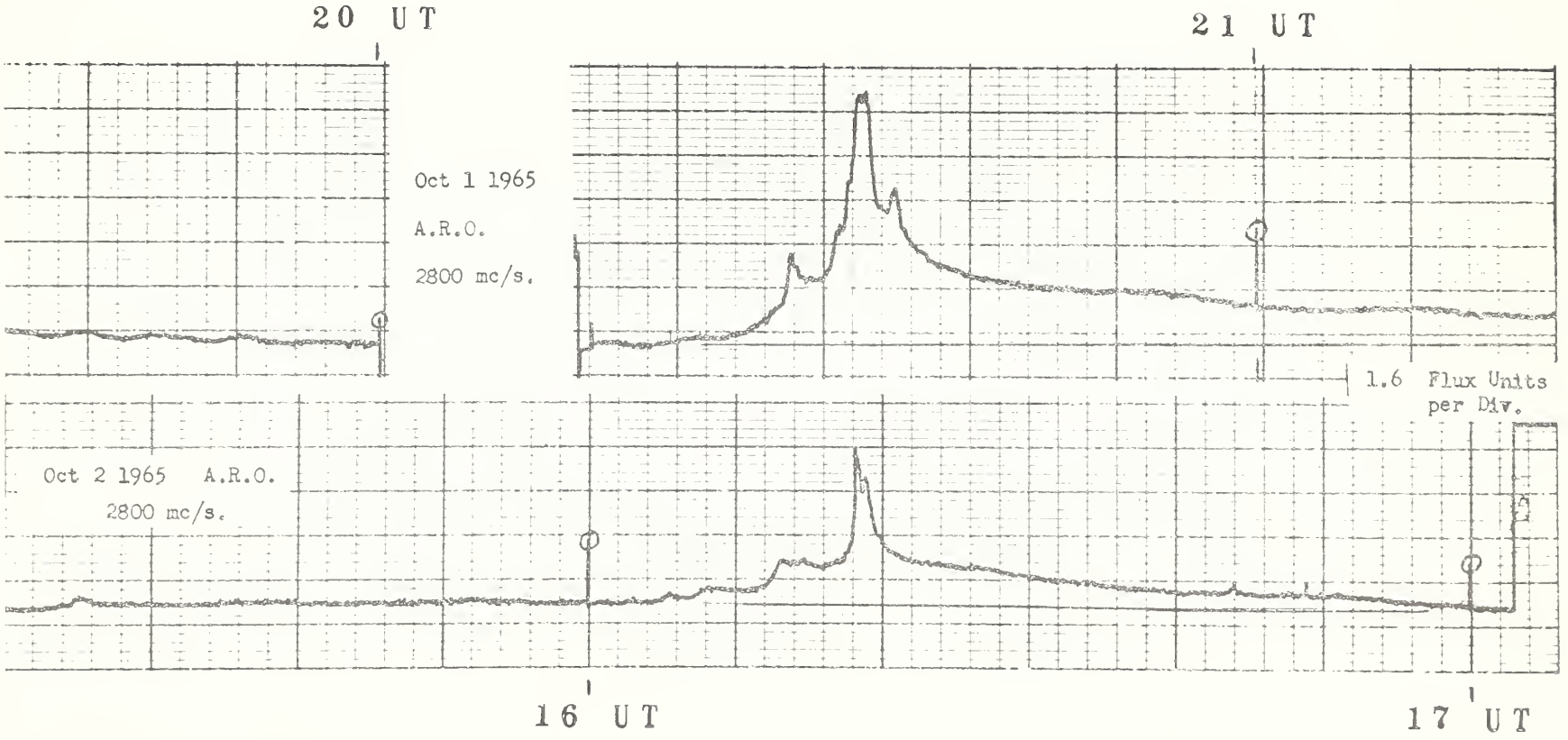
OCTOBER 1965

ARO-OTTAWA 2800 Mc/s
DRAO-PENTICTON 2700 Mc/s

OCT. 1965	URANE	DESCRIPTIVE TYPE	START UT	DURATION HRS MIN	MEAN FLUX	MAXIMUM TIME	MAXIMUM FLUX	REMARKS
1	3	Simple 3	b1420	> 50	1.0	1445	2.0	
1	3	Simple 3	1617	1 55	1.4	1710	2.8	
1	3	Simple 3	1820	1 50	1.5	1908	3.0	
1	3	Simple 3A	2020	2 20	7.0	Indet.	14.0	
	1	Simple 1	2027.5	2	3.5	2028.1	7.0	
	2	Simple 2f	2030.5	8	11.0	2033.5	32.0	
1	3	Simple 3	2247	45	0.8	2315	1.6	
2	3	Simple 3A	1246	24	1.4	1252	2.8	
	2	Simple 2	1246.8	3	6.4	1247.5	16.0	
2	2	Simple 2	1413	4	9.5	1415	21.0	
	4	Post B.I.	1417	16	1.0		2.0	
2	1	Simple 1	1525	1.5	0.6	1525.5	1.2	
2	3	Simple 3Af	1602	1 05	4.5	Indet.	9.0	
	1	Simple 1f	1612	4	2.0	1613	3.2	
	2	Simple 2f	1617.5	3	7.0	1618.3	19.0	
	1	Simple 1	1643.5	0.7	0.8	1644	1.6	
2	3	Simple 3	1745	1 00	2.0	1805	4.0	
2	3	Simple 3	1920	1 20	1.0	1943	2.0	
2	3	Simple 3f	2120	2 35	1.6	2252	3.2	
3	3	Simple 3f	1903	1 52	1.6	2005	3.2	
3	3	Simple 3	2130	2 20	2.3	2200	4.6	
4	3	Simple 3Af	1345	1 15	1.2	1447	2.4	
	1	Simple 1	1448	1	0.8	1448.7	1.6	
4	3	Simple 3A	1505	1 12	1.2	1535	2.4	
	1	Simple 1	1508	2	0.3	1509	0.6	
	1	Simple 1	1523	2	0.4	1524	0.8	
	1	Simple 1	1551	4	0.4	1553	0.8	
4	3	Simple 3A	1646	4 18	1.5	1700	3.0	
	1	Simple 1	1655	5	1.0	1657.5	2.0	
	1	Simple 1	1728	.3	0.5	1729.5	1.0	
	3	Simple 3	1845	1 15	1.4	1855	2.8	
	1	Simple 1	2049.8	1.8	0.5	2050.3	1.0	
5	1	Simple 1	1741	1	0.4	1741.5	0.8	
5	1	Simple 1	1753.5	0.5	0.5	1753.7	1.0	
5	1	Simple 1	2108	6	0.8	2110.5	1.6	
6	3	Simple 3	2005	55	0.5	2030	1.0	
6	1	Simple 1	2343.5	0.5	1.1	2343.8	2.2	
7	3	Simple 3	1905	1 00	0.4	Indet.	0.8	
8	6	Complex	1603	4	1.5	1605.3	3.0	
9	-	Rise	1630	1 00	---		4.0	
22	3	Simple 3	1555	35	0.4	1611	0.8	
28	-	Rise	1600	1 00	---		2.5	

SELECTED 2800 Mc s SOLAR NOISE BURSTS
ARO - OTTAWA, CANADA

OCTOBER 1965



SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATIONS

OCTOBER 1965

BOEING - SEATTLE

223 Mc/s

OCT. 1965	Type of Event	Start UT	End UT	Max UT	Flux Density at Time of Maximum $10^{-22}Wm^{-2}(cps)^{-1}$
4	High Continuum	1700*	2000		

* In progress

The equipment was down during the following times:

October	1	1700-1800, 2045-2110, 2135-2330 UT
	2	1840-2330 UT
	3	1700-2330 UT
	4	2005-2330 UT
	5	1945-2330 UT
	8	2310-2330 UT
	9	1720-2230 UT
	10	1845-2330 UT
	11	1950-2330 UT
	12	2120-2130 UT
	14	2115-2225 UT
	17	1600 - October 18, 1830 UT
	25	2025-2030, 2045-2100 UT
	30	1700-1750 UT

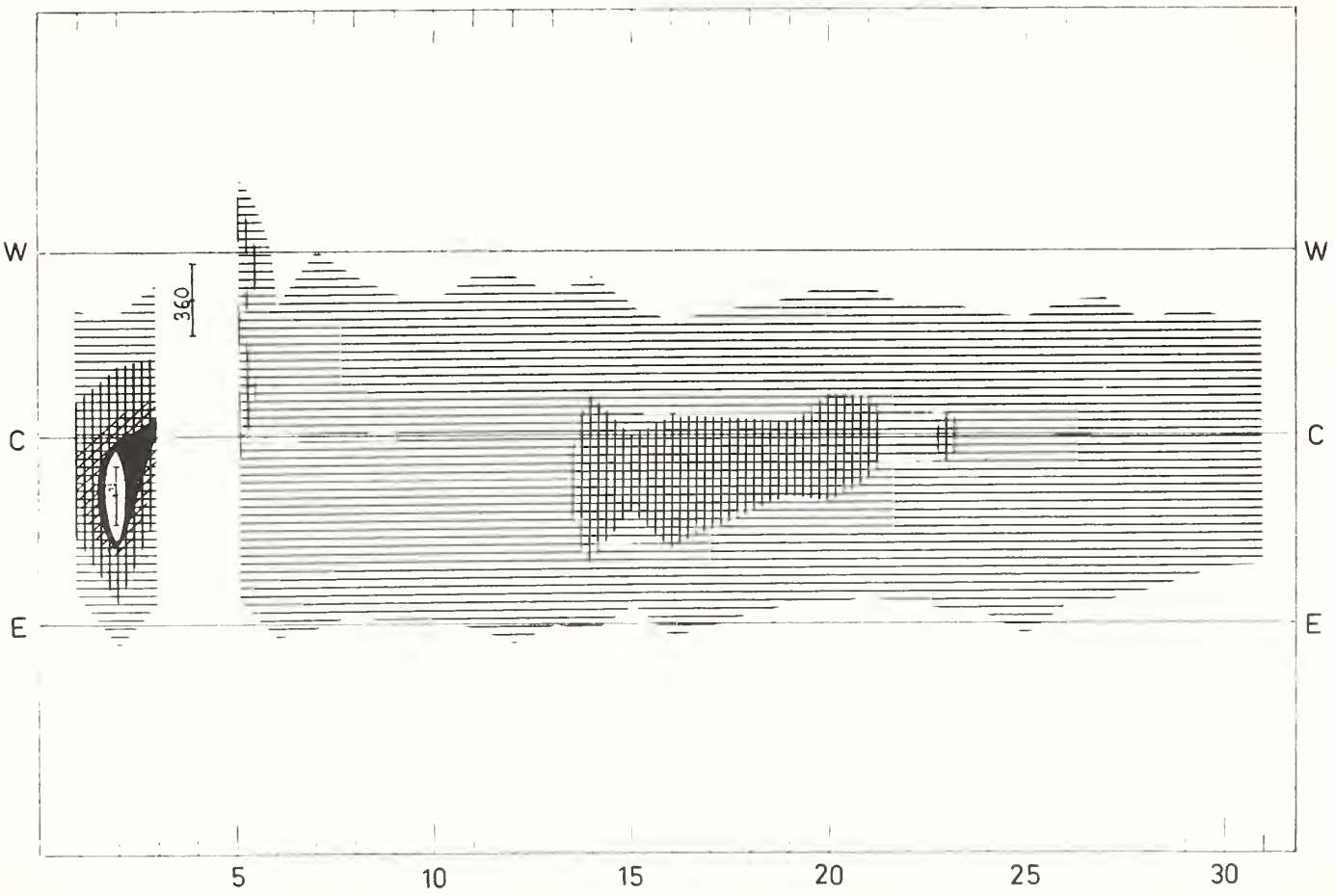
Normal Observing hours were from 1700-2330 UT

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATIONS

OCTOBER 1965

NANÇAY

169 Mc/s



OCTOBER 1965

PAI

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

OCTOBER 1965

ESSA BOULDER 108 Mcs

OCT. 1965	TYPE	START UT	TIME OF MAXIMUM UT	DURATION MINUTES	INTENSITY
4	6	1304E	1645	526D	2
7	3	2008	2008.3	2.0	3
14	3	2110	2110	2.7	2
30	3	2000	2000.6	2.3	2

NOMINAL TIMES OF OBSERVATION

OCTOBER 1965

ESSA BOULDER 108 Mcs

OCT. 1965	HOURS OF OBSERVATION U.T.	HOURS OF INTERFERENCE U.T.	OCT. 1965	HOURS OF OBSERVATION U.T.	HOURS OF INTERFERENCE U.T.
1	1301-1500; 1910-0028		16	1316-0005	
			17	1317-0003	
2	1302-0026	1302-1520	18	1318-0002	
3	1303-0025		19	1319-0000	
4	1304-0023		20	1320-2359	
5	1305-0021		21	1322-2357	1322-1430
6	1306-0020		22	1323-2356	1323-1435
7	1307-0018	1307-1500	23	1324-2355	
8	1308-0017		24	1325-2353	
9	1309-0015		25	1326-2352	
10	1310-0014		26	1327-2351	
11	1311-0012		27	1328-2349	
12	1312-0011		28	1329-2348	
13	1313-0009		29	1330-2347	
14	1314-0008		30	1331-2345	
15	1315-0006		31	1333-2344	

Interference was present near sunrise throughout October. Those times indicated had somewhat worse interference than other days.

SOLAR RADIO EMISSION

OUTSTANDING OCCURRENCES

OCTOBER 1965

HALEAKALA 107 Mc/s

OCT. 1965	TYPE	START UT	TIME OF MAXIMUM UT	DURATION MINUTES	INTENSITY
4	6	1617E	1647	250D	3
4	3	2055	2056	1.9	2
6	3	2022	2023	2.5	2
17	3	0217	0218	4.5	2
30	3	2044	2047	4.0	2

Normal observing hours are from sunrise to sunset which for October is on the average from 1620 UT to 0401 UT.

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

JULY 1965 — AUGUST 1965

FORT DAVIS

25 - 320 Mc/s

1965	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC	REMARKS
		TYPE	TIMES U.T	INT		
July						
1	1237-2230					
2	1237-2230					
3	1237-2230					
4	1237-2230					
5	1238-2230					
6	1237-2230					
7	1237-2230					
8	1238-2230	I	1238-1600	1	175-100	Weak I during day
9	1237-2230					
10	1539-2230					
11	1237-2230					
12	1237-2230					
13	1237-2230	I	1237-1440	1	175-100	Weak I during day
14	1237-2230					2143: U Burst
15	1237-2230					
16	1238-2230					
17	1238-2230					
18	1237-2230					
19	1237-2230					
20	1237-2230					
21	1237-2230					
22	1237-2230					
23	1237-2230					
24	1238-2230					
25	1624-1744 1804-2230					
26	1237-2230					
27	1237-2230					
28	1237-2230					
29	1237-2230					
30	1237-2230					
31	1237-2230					
August						
1	1308-2300					
2	1308-2300					
3	1308-2300					
4	1308-2300					
5	1309-2300					
6	1340-2300					
7	1305-2300					
8	1305-2300					
9	1306-2300					
10	1306-2300					
11	1306-2300					
12	1307-2300					
13	1306-2300					
14	1306-2300					
15	1306-2300					
16	1307-2300					
17	1306-2300					
18	1306-2300					
19	1306-2300					
20	1306-2300					
21	1306-2300					
22	1306-2330					
23	1308-2300					
24	1308-2300					
25	1306-2300					
26	1307-2300					
27	1413-2300					
28	1345-2300					
29	1428-2300					
30	1333-2300					
31	1349-2300					

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

SEPTEMBER 1965

FORT DAVIS

25-320 Mc/s

1965	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC	REMARKS
		TYPE	TIMES U T	INT		
September						
1	1514-2330					
2	1329-2330					
3	1330-2330					
4	1329-2330					
5	1330-2330					
6	1331-2330	IIIG	2058-2059	2	175-<25	
7	1330-2330					
8	1329-2330	I	1440-1700	1-2	180- 50	Weak I throughout day
9	1324-2330	I	1400-1840	1	180- 50	Weak I throughout day
10	1324-2330	I	1324-1500	1-2	280-100	Weak I throughout day
		IIIG	1600-1601	1	175- 60	
		I	1731-1824	1	200-100	
		I	1900-1952	1	180-125	
11	1324-2330	I	1324-1800	1-2	180- 50	Weak I throughout day
12	1324-2330	IIIG	1720-1723	2	180-<25	Weak I during day 1723: Reverse drift 25-75 Mc/s
13	1324-2330					
14	1324-2330					
15	1324-2330					
16	1325-1503					
	1529-2330					
17	1324-2330					
18	1324-2330					
19	1324-2330					
20	1325-2330					
21	1324-2330					
22	1324-2330					
23	1325-2330					Very weak I during day
24	1324-2330					
25	1324-2330	IIIG	2240-2242	2	280-<25	2241: U Burst 160-100 Mc/s
26	1325-2330					
27	1325-2330					
28	1325-2330					
29	1325-2330					
30	1325-2330					Weak I during day

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

OCTOBER 1965

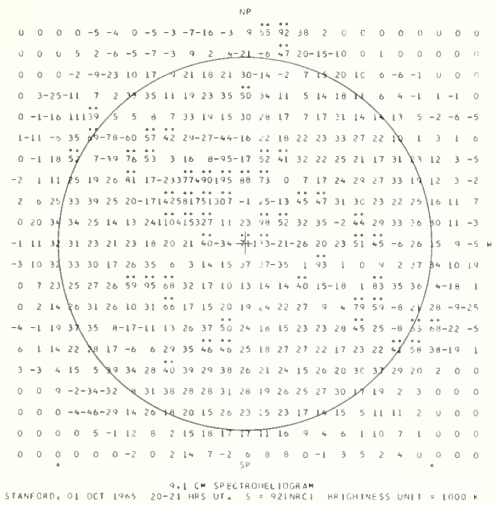
High Altitude Observatory
Boulder

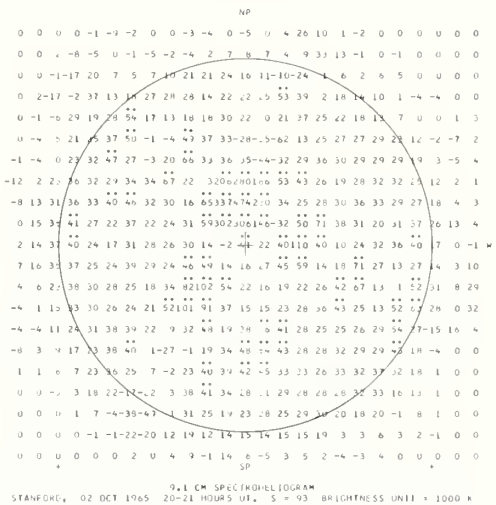
7.6-41 Mc/s

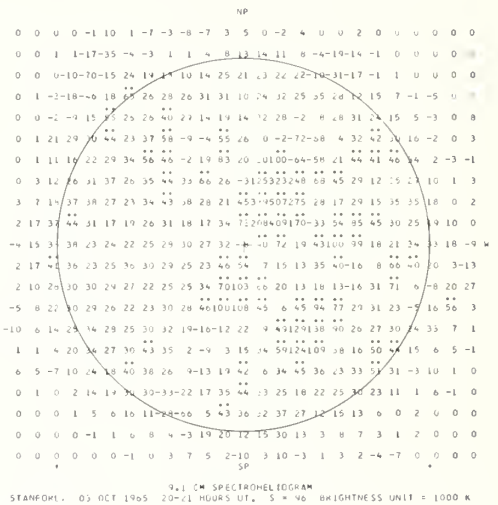
Date Oct 1965	Bursts				Date Oct 1965	Bursts			
	Type	Time (U.T.)	Intensity	Frequency Range (Mc/s)		Type	Time (U.T.)	Intensity	Frequency Range (Mc/s)
					cont.				
2 Oct	III	1612:15-1612:45	1+	14-41	5 Oct	III	1736:30-1737:30	1-	25-36
	III	1626-1627:30	3	7.6-41		III	1757:15-1757:45	1	10-41
	III	1735:45-1736:45	2	8-41		III	1808:15-1808:45	1-	22-38
	III	1742:15-1744	1+	10-41		III	1819-1819:30	1	19-41
	III	1848:30-1850:30	2	8-41		III	1903:15-1903:30	1-	22-36
	III	1906-1907:15	1+	9-41		III	2027:45-2029:45	1	17-41
	III	1910-1910:45	1+	10-41		III	2031:30-2031:45	1-	22-35
	III	1912:30-1913:15	1+	9-41		III	2038:15-2038:45	1-	21-40
	III	2106:30-2107	1	17-41		III	2040:30-2041	2	16-41
	III	2107:45-2108:15	1-	28-41	6	III	1419:15-1420	1+	20-41
	III	2234:30-2235	1-	27-41		III	1540:30-1541:15	2	24-34
	III	2328:45-2329:15	1-	31-41		III	1733:15-1733:45	1-	24-40
3	III	1541:30-1541:45	1-	23-36		III	1950:15-1950:45	1-	19-34
	III	1549:15-1549:30	1-	25-36		III	2324:30-2325:30	1	20-41
	III	1723:30-1724	1-	21-38		III	2325:30-2326	1-	23-41
	III	1743:15-1744:30	1	17-41		III	2328:45-2329:30	1+	19-41
	III	1745:30-1745:45	1-	33-41	7	III	1533:30-1534:15	2	21-41
	III	1829:30-1829:45	1-	27-41		III	2002:45-2003:30	1-	26-41
	III	2029:45-2030	1-	21-41		III	2221:15-2222:15	1+	15-41
	III	2123-2123:15	1-	24-41		III	2304:30-2305:15	1+	17-41
4	continuum	b1411:30-2058	2	19-41	8	III	1542-1542:30	1	26-41
	III	2108:15-2108:30	1-	20-41		III	1603:15-1606:45	3	16-41
	III	2112:30-2112:45	1-	23-37	18	no observ.	1400-1906		
	III	2134-2134:15	1-	22-38	21	no observ.	1652-1759		
	III	2145:30-2145:45	1	19-41	22	III	1711:45-1713:30	2	17-41
	III	2206:45-2207	1-	24-39	26	III	1824:45-1825	1-	27-41
	III	2344-2344:15	1-	25-34					
5	III	1544-1544:15	1	20-41					
	III	1600-1600:15	1	19-31					
	III	1634:30-1635	1	21-38					

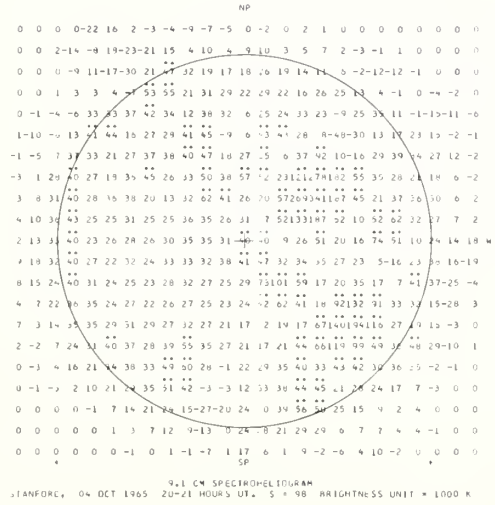
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

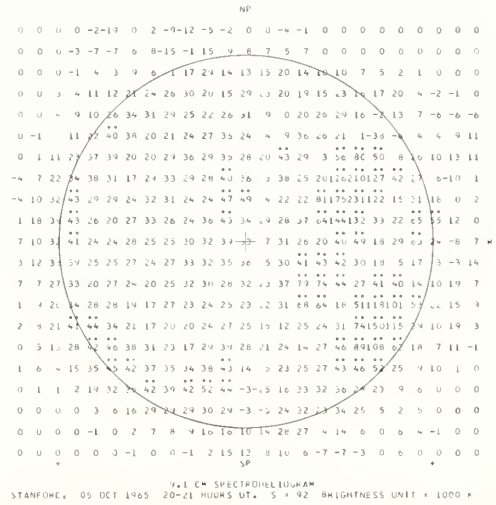
STANFORD — **OCTOBER 1965** — **9.1 cm**

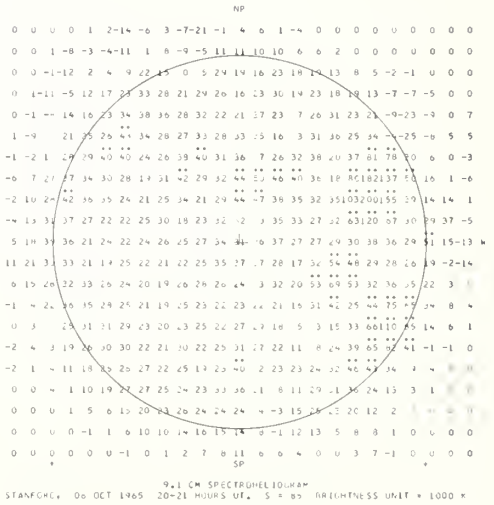










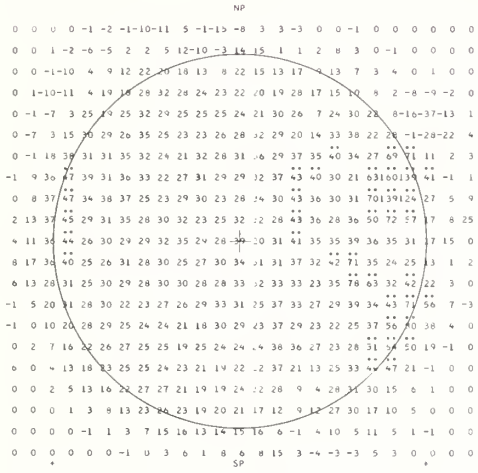


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

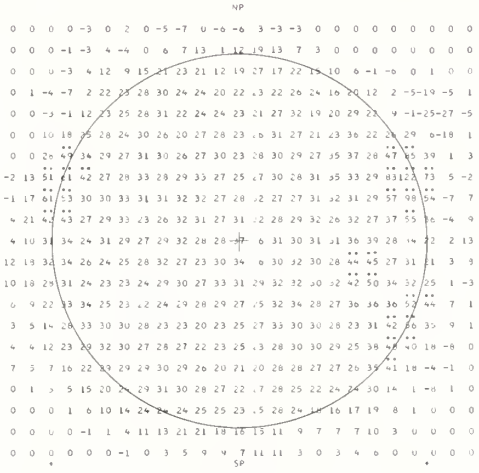
STANFORD

OCTOBER 1965

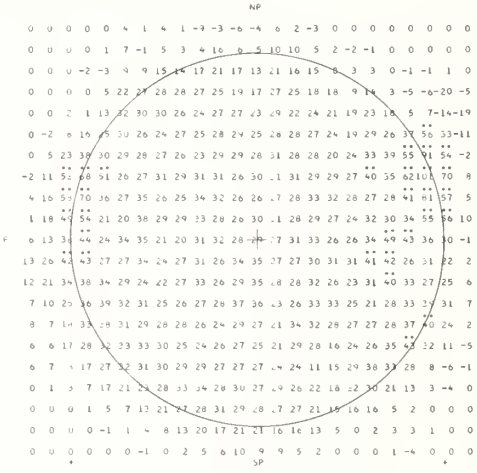
9.1 cm



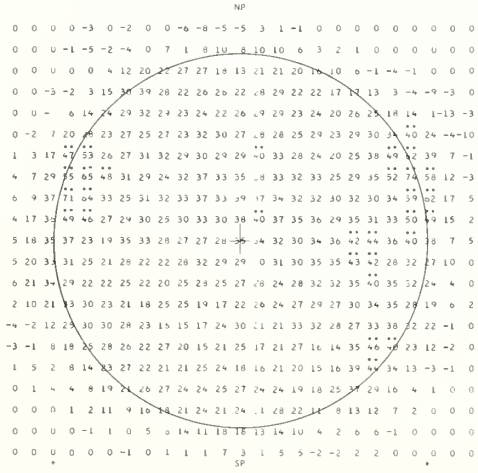
9.1 CM SPECTROHELIOGRAM
STANFORD, 07 OCT 1965 20-21 HOURS UT. S = 84 BRIGHTNESS UNIT = 1000 K



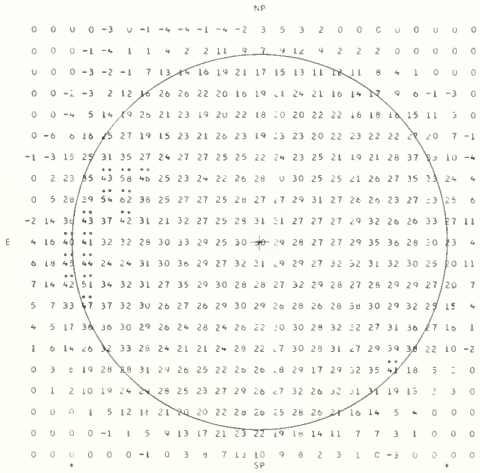
9.1 CM SPECTROHELIOGRAM
STANFORD, 08 OCT 1965 20-21 HOURS UT. S = 83 BRIGHTNESS UNIT = 1000 K



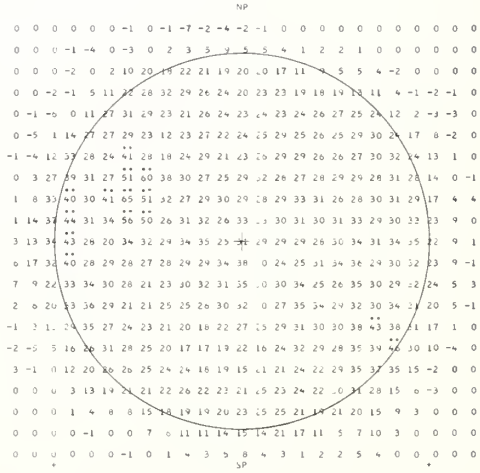
9.1 CM SPECTROHELIOGRAM
STANFORD, 09 OCT 1965 20-21 HOURS UT. S = 83 BRIGHTNESS UNIT = 1000 K



9.1 CM SPECTROHELIOGRAM
STANFORD, 10 OCT 1965 20-21 HOURS UT. S = 80 BRIGHTNESS UNIT = 1000 K



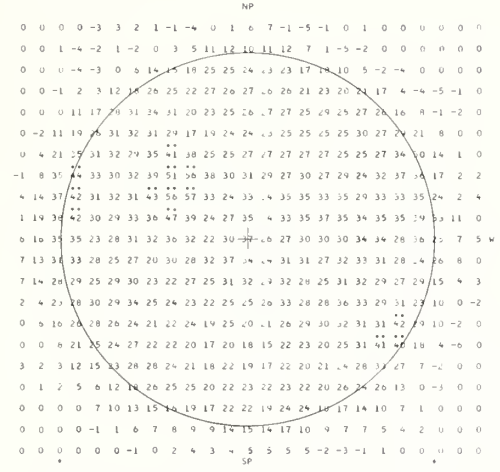
9.1 CM SPECTROHELIOGRAM
STANFORD, 11 OCT 1965 20-21 HOURS UT. S = 76 BRIGHTNESS UNIT = 1000 K



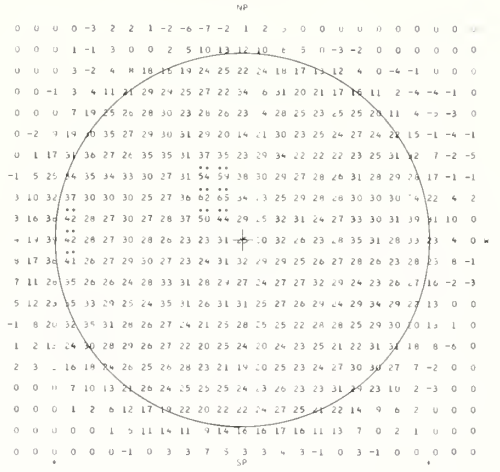
9.1 CM SPECTROHELIOGRAM
STANFORD, 12 OCT 1965 20-21 HOURS UT. S = 75 BRIGHTNESS UNIT = 1000 K

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

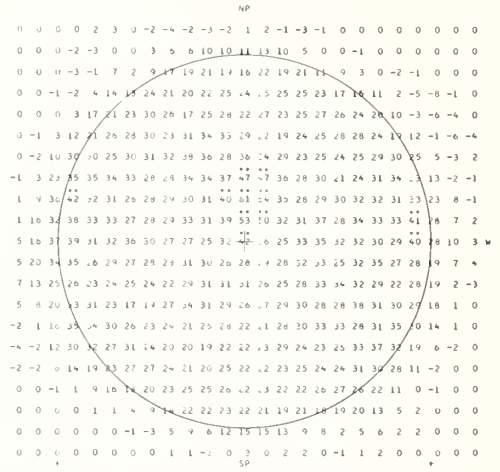
STANFORD — OCTOBER 1965 — **9.1 cm**



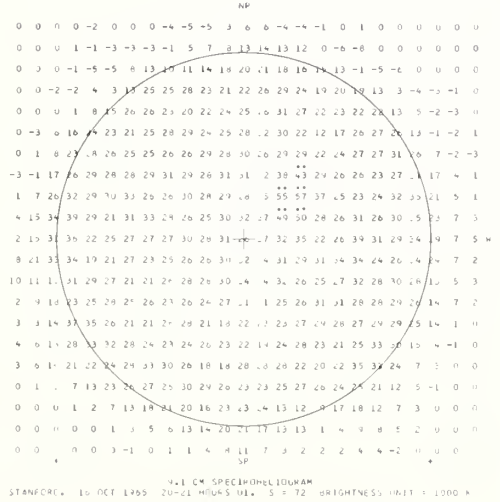
9.1 CM SPECTROHELIOGRAM
STANFORD, 13 OCT 1965 20-21 HOURS UT. S = 76 BRIGHTNESS UNIT = 1000 K



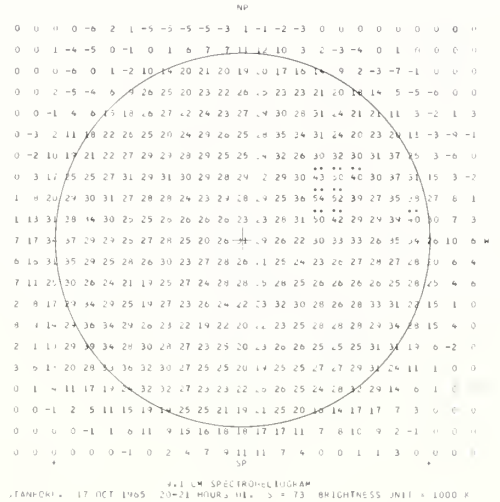
9.1 CM SPECTROHELIOGRAM
STANFORD, 14 OCT 1965 20-21 HOURS UT. S = 75 BRIGHTNESS UNIT = 1000 K



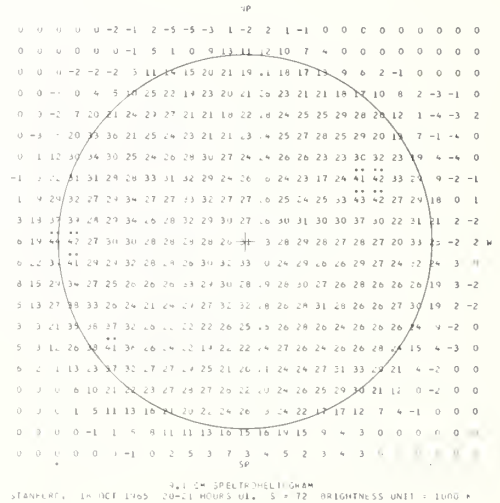
9.1 CM SPECTROHELIOGRAM
STANFORD, 15 OCT 1965 20-21 HOURS UT. S = 74 BRIGHTNESS UNIT = 1000 K



9.1 CM SPECTROHELIOGRAM
STANFORD, 16 OCT 1965 20-21 HOURS UT. S = 72 BRIGHTNESS UNIT = 1000 K



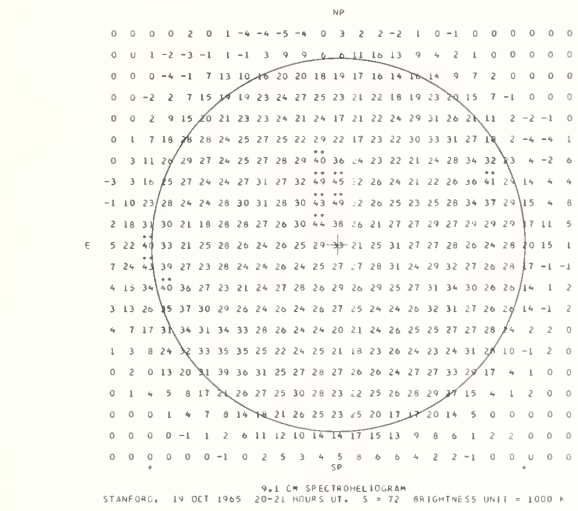
9.1 CM SPECTROHELIOGRAM
STANFORD, 17 OCT 1965 20-21 HOURS UT. S = 73 BRIGHTNESS UNIT = 1000 K

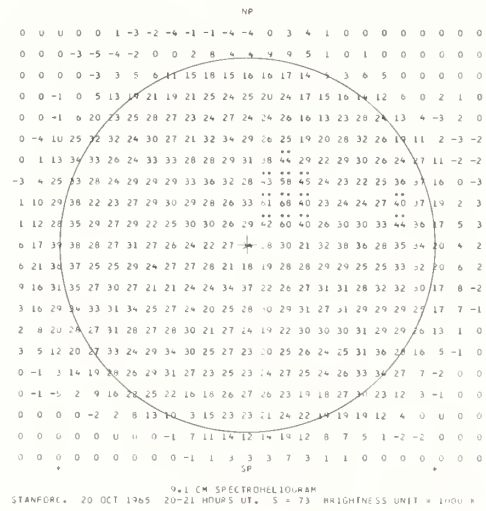


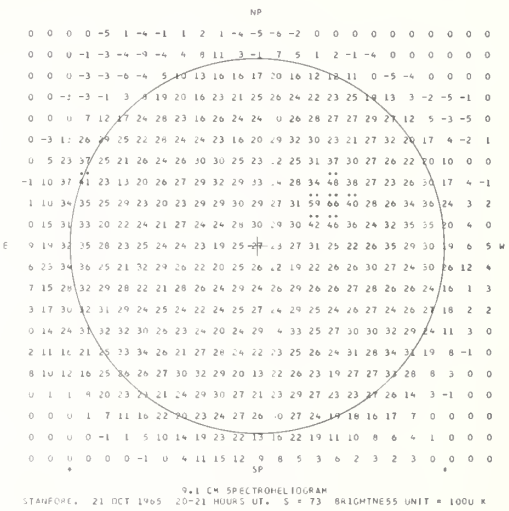
9.1 CM SPECTROHELIOGRAM
STANFORD, 18 OCT 1965 20-21 HOURS UT. S = 72 BRIGHTNESS UNIT = 1000 K

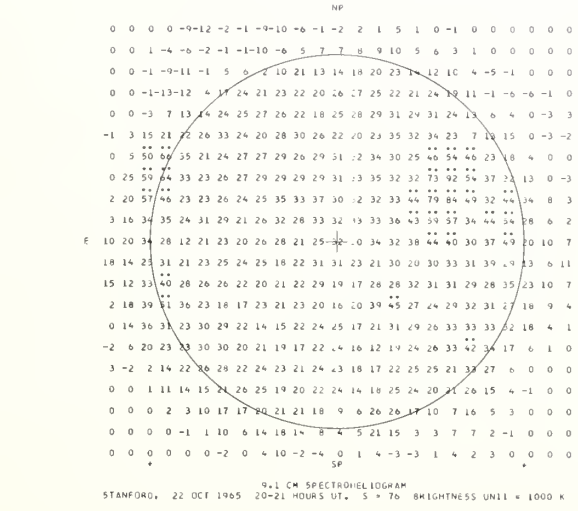
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

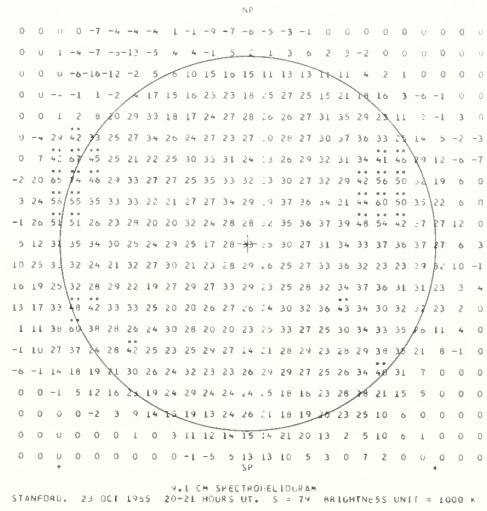
STANFORD — **OCTOBER 1965** — **9.1 cm**

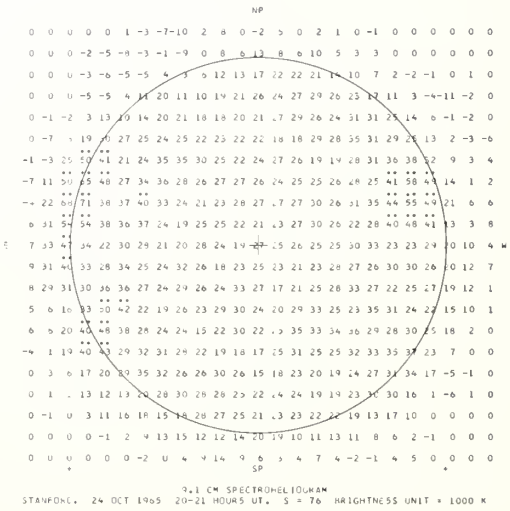






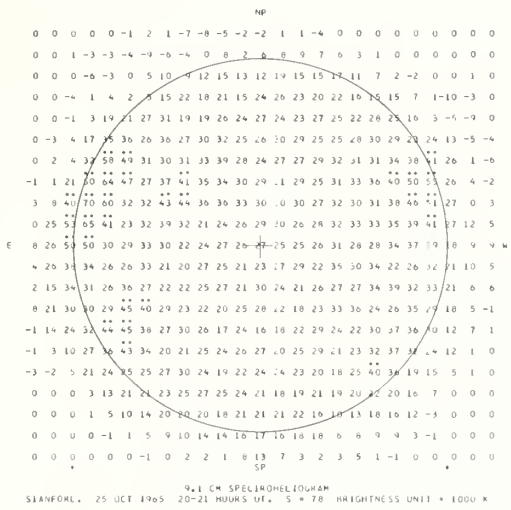


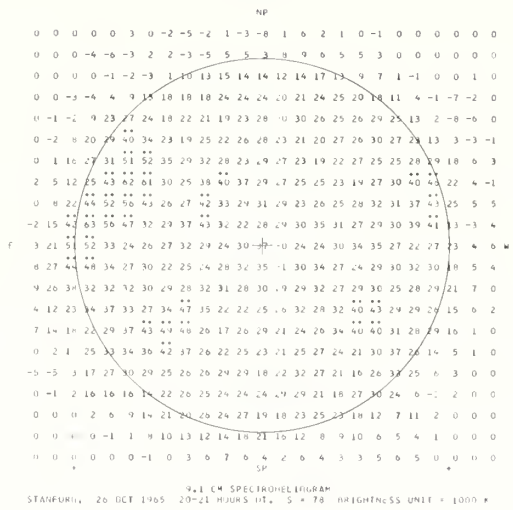


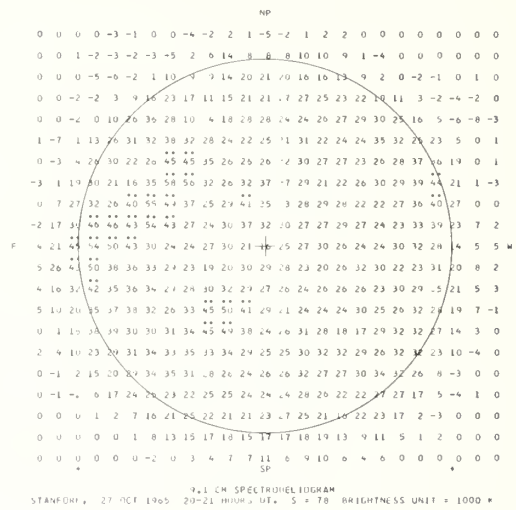


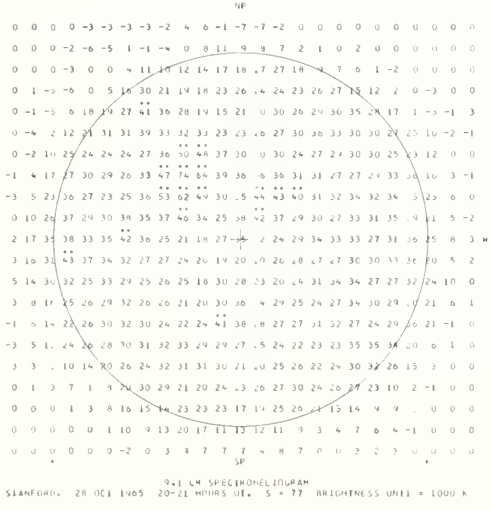
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

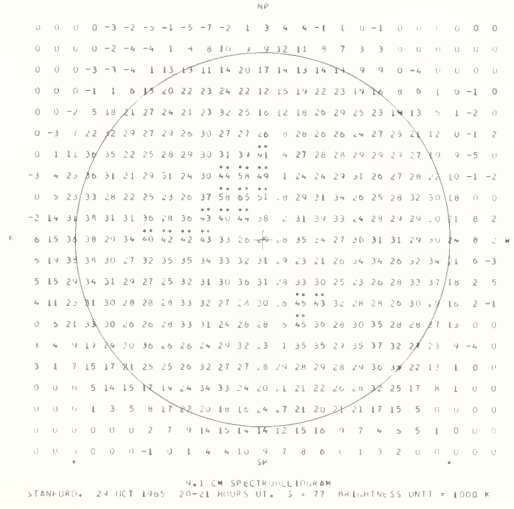
STANFORD — **OCTOBER 1965** — **9.1 cm**

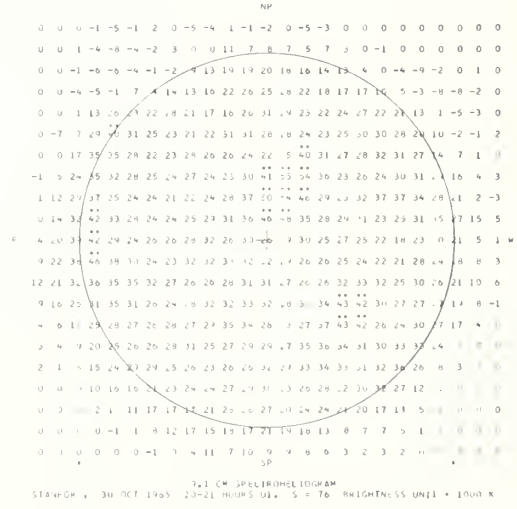






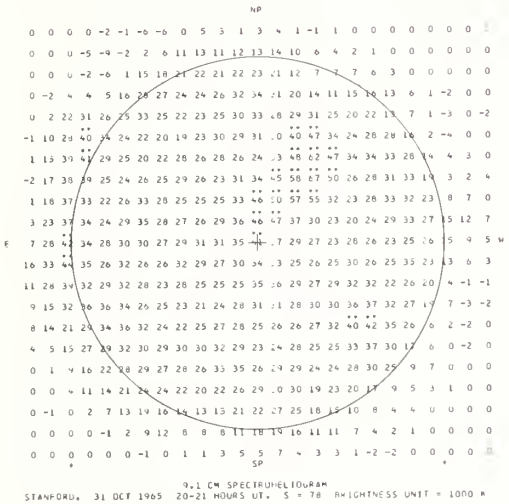






SOLAR RADIO EMISSION SPECTROHELIOGRAMS

STANFORD OCTOBER 1965 **9.1 cm**



9.1 CM SPECTROHELIOGRAM
STANFORD, 31 OCT 1965 20-21 HOURS UT. S = 78 BRIGHTNESS UNIT = 1000 K

EAST - WEST SOLAR SCANS

OCTOBER 1965

FLEURS, AUSTRALIA

21 cm
Fan - Beam with 2 minutes of arc
E - W Resolution

1965 October 2 0146 UT | 1965 October 3 0146 UT | 1965 October 4 0110 UT | 1965 October 5 0145 UT

1965 October 6 0113 UT | 1965 October 7 0145 UT | 1965 October 8 0104 UT | 1965 October 9 0140 UT

1965 October 10 0305 UT | 1965 October 11 0147 UT | 1965 October 12 0143 UT | 1965 October 14 0142 UT

1965 October 15 0247 UT | 1965 October 16 0138 UT | 1965 October 20 0109 UT | 1965 October 21

1965 October 22 | 1965 October 23 0133 UT | 1965 October 24 0141 UT | 1965 October 25 0141 UT

1965 October 26 0100 UT | 1965 October 27 0100 UT | 1965 October 29 0303 UT

COSMIC RAY INDICES

(Neutron Monitors)

SEPTEMBER 1965

SEPT. 1965	CHURCHILL	CLIMAX	DALLAS
	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR
1	6520.9	3317.3	6398.8
2	6534.5	3333.5	6426.5
3	6551.9	3337.1	6424.8
4	6503.9	3318.2	6398.0(23)
5	6497.6	3318.3	6406.5
6	6512.0	3321.5(38)	6415.5
7	6534.7	3325.3	6424.1
8	6539.2	3337.2	6444.7
9	6566.8	3348.4	6466.9
10	6587.4	3356.8	6488.5
11	6565.8	3347.9	6462.2
12	6532.5	3324.0	6435.3
13	6493.6	3298.6	6402.2
14	6525.9	3314.8	6418.5
15	6544.2	3345.5	6447.0
16	6508.7	3355.5	6460.8
17	6478.3	3343.5	6416.8
18	6485.4	3345.2	6412.8
19	6521.8	3341.2	6403.9
20	6547.8	3346.3	6416.4
21	6549.1	3351.8	6421.8
22	6565.2	3350.2	6424.9
23	6527.6	3321.3	6385.9
24	6535.2	3312.1	6382.3
25	6514.5	3324.4(36)	6399.9
26	6521.7	3336.0	6415.7
27	6497.9	3340.5	6417.1
28	6488.2	3340.1	6412.7
29	6509.7	3347.2	6418.3
30	6540.9	3341.2	6433.2

( ) Number of hours for which data are available if less than 24 (or number of section hours if less than 40 for Climax).

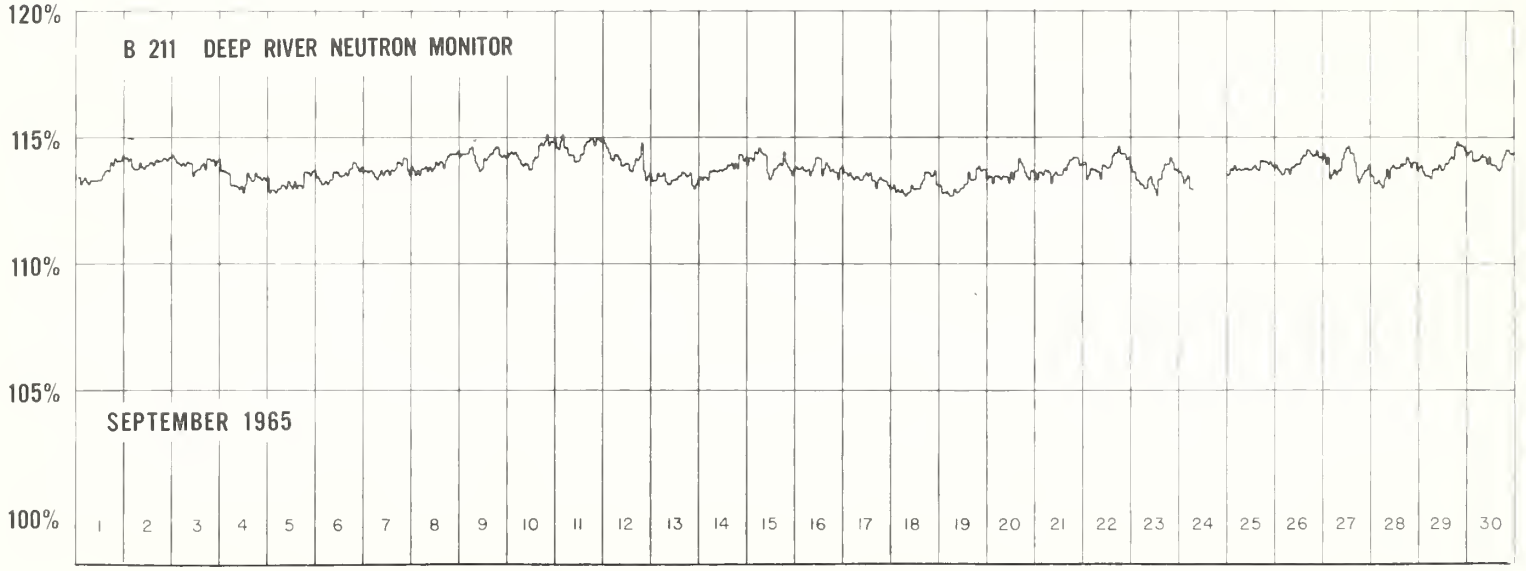
Churchill Super Neutron Monitor, Scaling Factor 120.

Climax IGC Station B305, Scaling Factor 128.

Dallas Super Neutron Monitor, Scaling Factor 120.

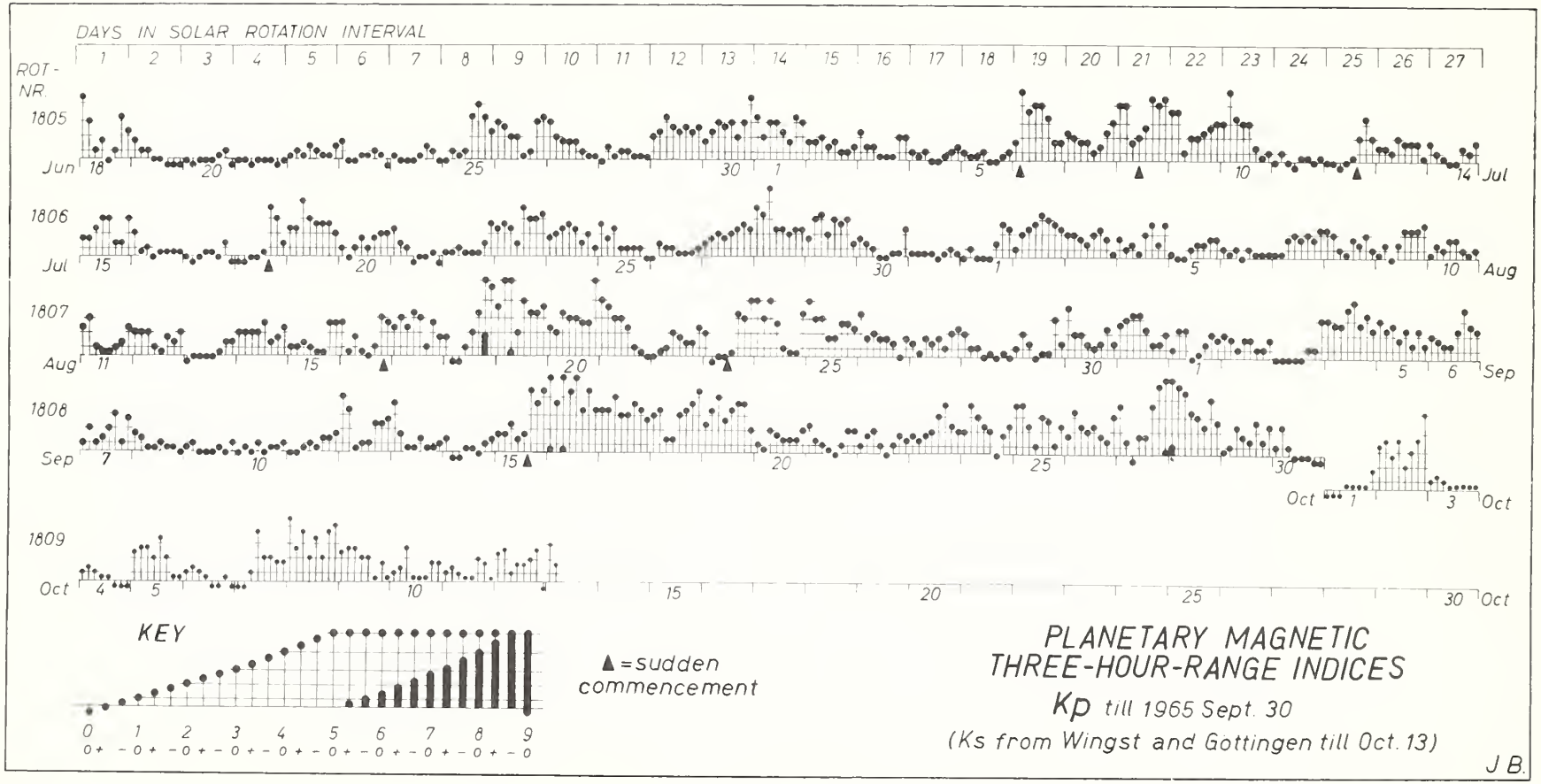
COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)



SEPTEMBER 1965

SEPT. 1965	C	Values Kp — Three hour Gr. interval 1 2 3 4	5 6 7 8	Sum	Ap	Final Selected Days
1	0.4	1o 2+ 2+ 0+	1- 1+ 2o 2-	12-	6	Five
2	0.3	2o 2- 1o 2-	2- 1o 1o 2-	12-	5	Quiet
3	0.1	0+ 0+ 0+ 0+	0+ 1o 1o 3o	7-	4	
4	1.1	3o 3- 3- 4-	4o 3- 3+ 2+	24+	16	8
5	0.6	3o 2+ 3- 2-	2+ 1+ 2+ 1+	17o	9	9
						10
6	0.7	2o 2- 1+ 1+	2+ 4- 3- 2+	17+	9	14
7	0.5	1o 2o 1o 1+	2o 3o 1o 3-	14o	7	30
8	0.1	2- 1+ 1- 1-	1o 1- 1- 0+	7o	4	
9	0.1	1- 1o 0+ 0+	0+ 1- 0+ 1o	5-	3	
10	0.0	0+ 1- 0+ 1o	0+ 1- 1- 1o	5o	3	
11	0.2	0+ 0+ 1- 1o	1- 1+ 1+ 2-	7+	4	Five
12	0.7	4o 3+ 1- 1o	1o 2+ 2+ 3-	17+	11	Disturbed
13	0.4	4- 2- 1- 1-	1+ 1- 1- 1o	10+	6	
14	0.1	1+ 0o 0o 1-	1- 0+ 1o 1+	5+	3	16
15	1.1	2- 2- 2+ 1+	2- 4+ 4- 4+	21o	15	17
						19
16	1.5	5+ 4- 5+ 4+	5o 3+ 4+ 3+	35-	35	27
17	1.1	3+ 3+ 4o 3o	3o 4- 3+ 3-	26+	18	28
18	1.0	3o 3+ 1+ 1+	3o 3+ 4- 4+	23+	16	
19	1.0	2+ 3+ 4o 3-	3+ 4- 4- 2o	25o	17	
20	0.2	1o 1- 2o 2-	1+ 1+ 1+ 2o	11+	5	
21	0.4	2+ 1+ 1o 1-	0+ 1o 2o 2o	11-	5	Ten
22	0.2	1o 2- 2o 1o	0+ 1o 2- 1+	10o	5	Quiet
23	0.7	2- 1+ 2- 2o	3o 4- 2+ 2o	18-	10	
24	0.5	2o 4- 3o 2+	2o 0+ 2- 2+	17+	10	3
25	0.7	4- 4- 2+ 1o	3o 3- 1o 2+	20-	12	8
						9
26	0.6	2- 3+ 2+ 2o	2+ 2- 1+ 3o	18-	9	10
27	1.1	4- 1+ 0o 2-	2- 4- 5- 5+	22o	20	11
28	1.3	6- 5- 4+ 3+	3o 2+ 4o 3-	30o	27	14
29	0.5	1- 1o 2+ 2-	1+ 3- 1+ 2+	13+	7	20
30	0.0	1o 2+ 1o 0+	0+ 0+ 0o 0o	5+	3	21
						22
						30
Mean:	0.57			Mean:	10	


DAYS IN SOLAR ROTATION INTERVAL
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ROT-NR.
1805
Jun 18 20 25 30 1 5 10 14 Jul
1806
Jul 15 20 25 30 1 5 10 Aug
1807
Aug 11 15 20 25 30 1 5 6 Sep
1808
Sep 7 10 15 20 25 30 Oct 1 3 Oct
1809
Oct 4 5 10 15 20 25 30 Oct
KEY
0 1 2 3 4 5 6 7 8 9
0+ - 0 + - 0 + - 0 + - 0 + - 0 + - 0 + - 0 + - 0
▲ = sudden commencement
PLANETARY MAGNETIC
THREE-HOUR-RANGE INDICES
Kp till 1965 Sept. 30
(Ks from Wingst and Gottingen till Oct. 13)
J B.

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC, NORTH PACIFIC — SEPTEMBER 1965

SEP 1965	WHOLE DAY INDICES			ADVANCE FORECASTS (Jc-REPORTS) FOR WHOLE DAY	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES				NORTH ATLANTIC SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF				NORTH PACIFIC 6-HOURLY QUALITY FIGURES				GEOMAGNETIC INDICES K_{FR}		A_{FR}		K_{SI}		A_{SI}
	NORTH ATLANTIC	NORTH PACIFIC	AVERAGE HIGH LATITUDE		00 TO 06	06 TO 12	12 TO 18	18 TO 24	00	06	12	18	00 TO 06	06 TO 12	12 TO 18	18 TO 24	HALF DAY (1)	(2)	OBSERVED	PREDICTED	HALF DAY (1)	(2)	
01	6o	6	6	7	6o	5o	7o	7-	6	6	7	7	6	5	6	6	2	2	6	3	2	1	4
02	7-	6	6	7	7-	6+	7o	7o	6	6	7	7	6	6	6	6	2	1	4	5	2	1	4
03	7-	6	6	6	6o	6+	7-	7o	7	6	7	7	6	5	6	6	0	2	4	7	0	1	2
04	6+	6	6	6	7-	6o	7-	7-	7	6	7	7	6	5	6	6	3	3	14	7	3	2	18
05	6o	6	6	6	5+	5+	7-	7-	6	5	7	7	6	6	6	6	2	2	8	7	2	1	6
06	6+	6	6	6	6-	6-	7-	7o	6	6	7	7	6	6	6	6	2	3	10	7	1	2	7
07	6+	6	6	6	6-	6-	7-	7-	6	6	7	7	6	6	6	6	2	2	7	9	1	2	6
08	6o	6	6	6	6o	5-	7-	7-	6	6	7	7	6	6	6	6	1	1	3	9	1	0	2
09	6+	6	6	6	6-	6o	7-	7-	6	5	7	7	6	6	6	6	1	1	2	5	0	0	0
10	6+	6	6	6	6+	5+	7-	7-	7	6	7	7	6	6	6	6	1	1	2	7	0	0	0
11	6+	6	6	6	6+	5+	7-	7-	7	6	7	7	7	6	6	6	0	1	2	7	0	1	2
12	6+	6	6	6	7-	6o	7-	7-	6	5	7	7	6	6	6	6	2	2	10	7	1	1	5
13	6+	6	6	6	6+	6-	7-	7-	6	5	7	7	6	6	6	6	2	1	5	9	1	0	3
14	6+	6	6	6	6o	5o	7o	7-	7	6	7	7	6	6	6	6	1	1	2	11	1	0	2
15	6+	6	6	6	6+	6-	7-	6o	7	6	7	6	6	6	6	6	2	3	12	11	2	2	8
16	6-	6	6	6	5+	5o	6+	6+	6	4	5	6	6	6	7	6	(4)	3	24	7	(5)	(4)	47
17	6-	6	6	6	4+	4+	7-	7-	5	4	6	6	6	6	7	6	(4)	3	16	5	(4)	2	22
18	6o	6	6	6	6-	5+	6+	7-	5	4	7	7	7	6	6	7	2	3	11	5	2	3	13
19	6-	6	6	6	5o	4o	7-	6+	5	4	7	7	7	7	6	6	3	2	11	7	3	2	15
20	6-	6	6	5	5+	5-	6+	7-	5	5	6	6	6	6	6	6	1	1	4	15	2	0	4
21	6+	6	6	5	6-	5+	7-	7-	5	5	7	7	6	6	6	7	2	1	5	11	1	1	2
22	6+	6	6	6	6-	6-	7-	7-	6	5	7	7	6	6	6	6	2	1	5	9	1	0	3
23	6+	6	6	6	6-	6-	7o	7-	6	6	7	6	6	6	6	6	1	2	6	5	1	2	5
24	6+	6	6	6	6o	6-	7o	7-	6	5	6	7	6	6	6	6	3	1	8	3	3	1	9
25	6+	6	6	6	6o	5+	7-	7o	6	6	7	7	6	6	6	6	2	2	9	7	2	2	7
26	6o	7	7	6	6+	5o	7-	6+	6	5	7	7	7	7	7	6	2	2	8	9	2	2	7
27	6+	6	6	6	6o	6o	7o	6o	6	5	7	7	6	6	7	6	1	3	12	9	1	2	8
28	5-	7	6	6	4+	3+	6o	5-	5	3	5	6	7	7	6	6	(5)	2	28	7	(5)	3	37
29	6-	7	6	6	4+	5o	6o	6+	4	4	7	6	6	7	7	7	1	2	4	5	2	2	8
30	6+	7	7	6	6o	6-	7-	7-	6	5	7	7	6	7	7	6	1	0	3	7	1	0	2

QUIET	P	24	16	11	24	23
	S	6	11	16	6	7
	U	0	0	0	0	0
	F	0	0	0	0	0
DISTURBED	P	0	1	3	0	0
	S	0	2	0	0	0
	U	0	0	0	0	0
	F	0	0	0	0	0

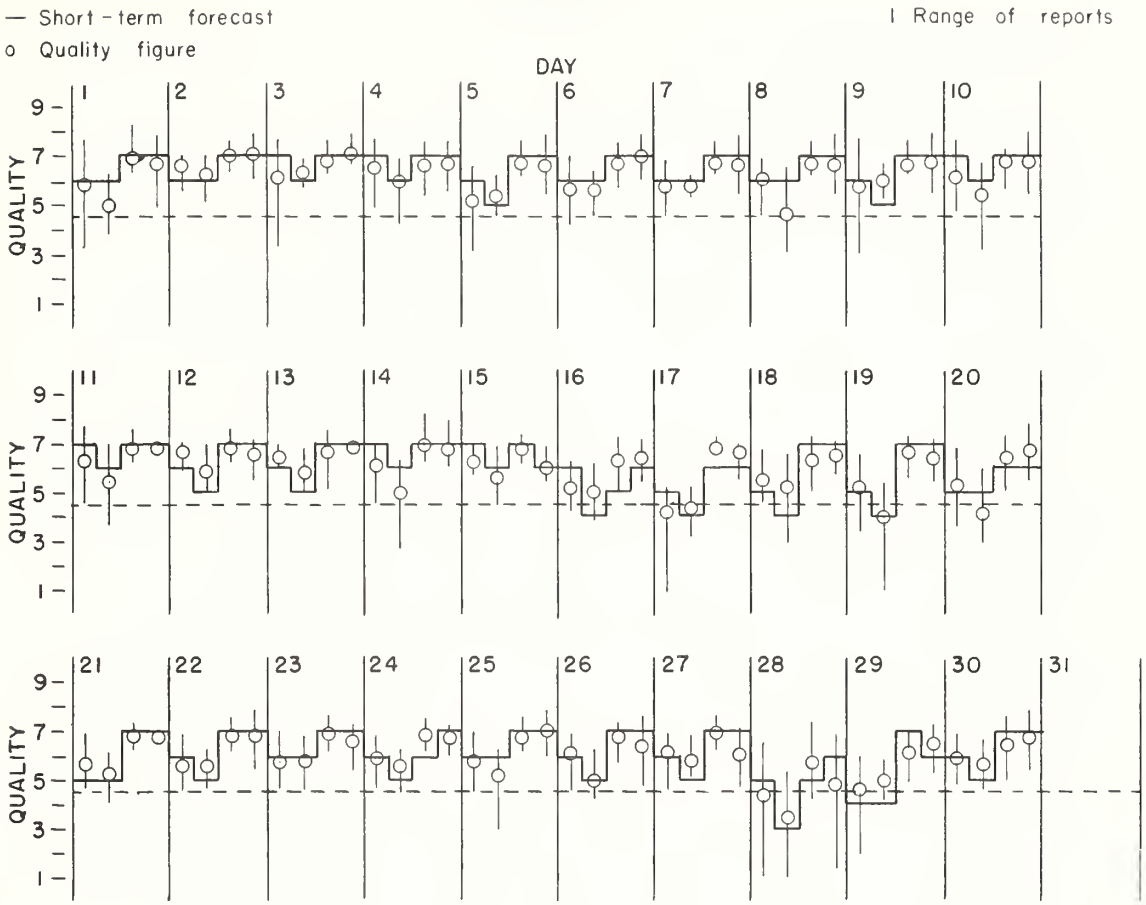
1) THE ADVANCE Jc-FORECASTS ARE SCORED AGAINST THE AVERAGE HIGH LATITUDE WHOLE-DAY INDICES.

2) THE OBSERVED INDICES FOR THE NORTH PACIFIC ARE LOW WEIGHT BECAUSE OF INSUFFICIENT DATA AVAILABLE FOR THEIR PREPARATION.

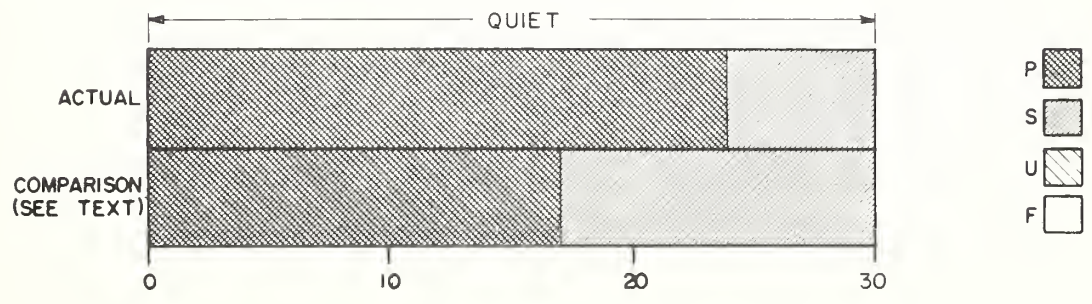
3) THE PREDICTED A_{FR} INDICES ARE ISSUED EACH WEDNESDAY FOR THE COMING SEVEN DAYS. THE VALUE FOR THE FIRST DAY OF EACH PREDICTION PERIOD IS UNDERSCORED.

NORTH ATLANTIC

SEPTEMBER 1965

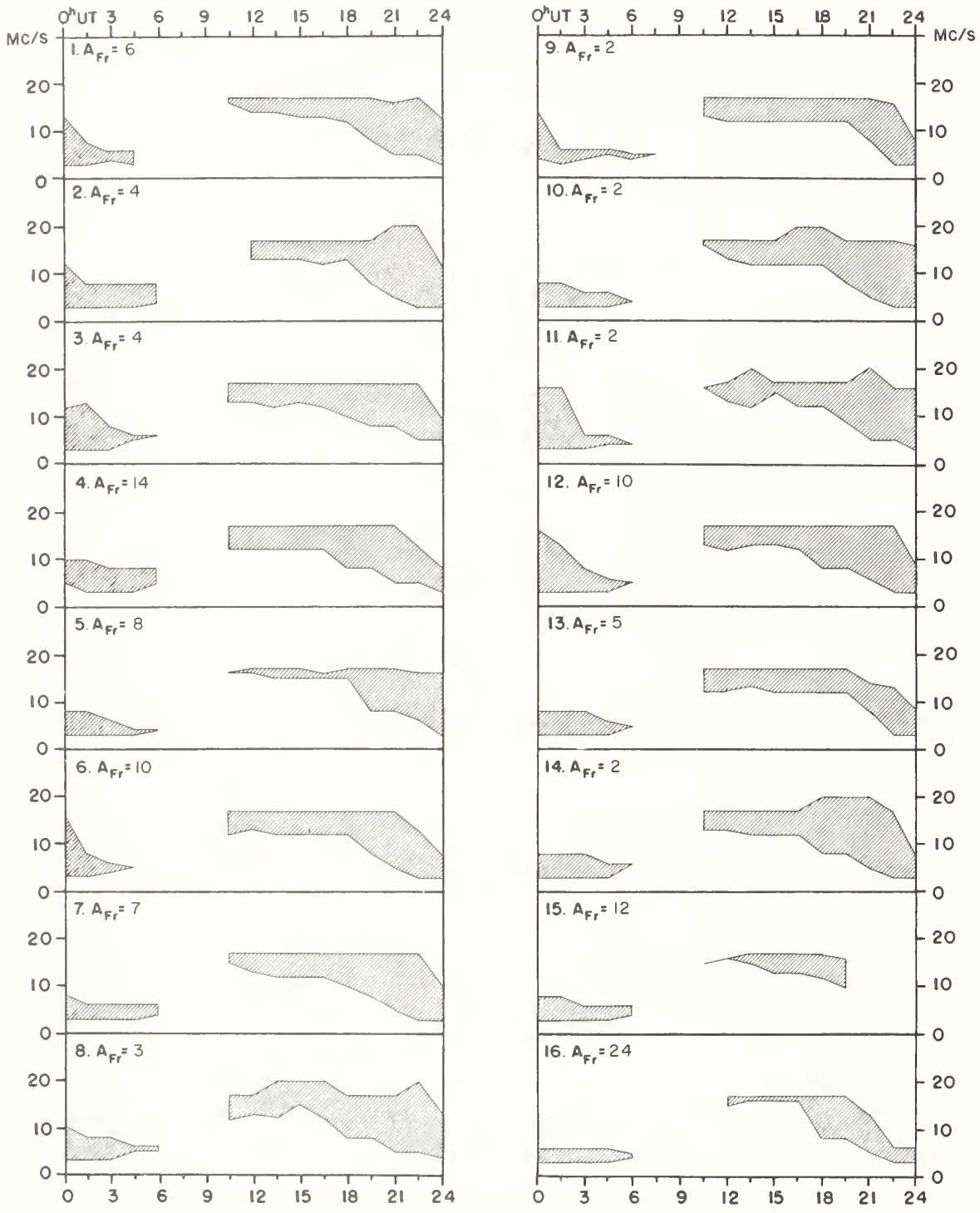


HIGH LATITUDE

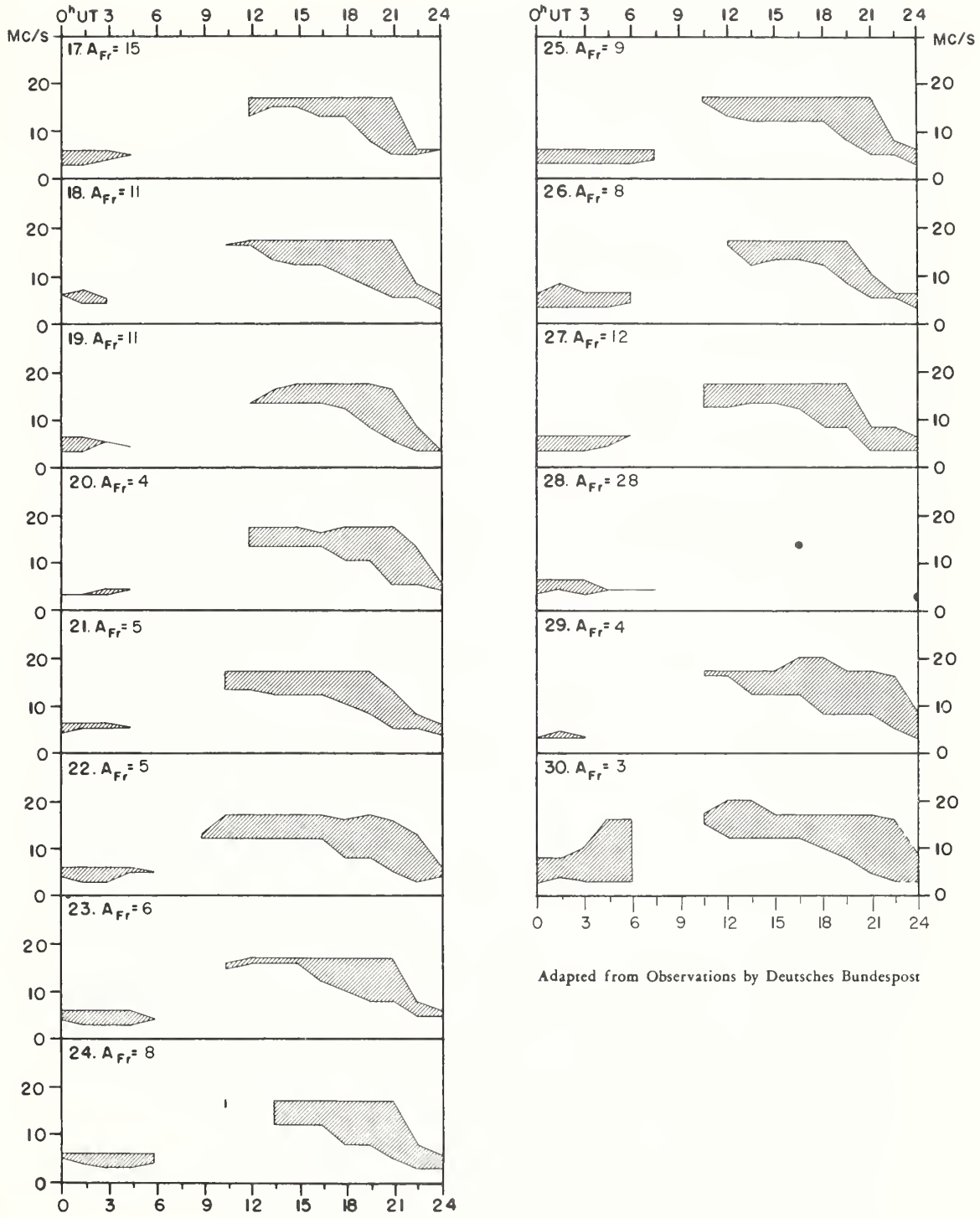


USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

SEPTEMBER 1965



SEPTEMBER 1965



Adapted from Observations by Deutsches Bundespost

IQSY ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

OCTOBER 1965

Oct. 1965	TIME OF ISSUE UT	ADVANCE GEOPHYSICAL ALERT	WORLDWIDE GEOPHYSICAL ALERT			
			NO.	TYPE	TIMING	ELABORATION
1	0400		229	Solar Activity	Exists	
	2250	Sac Peak, Solar Flare 01/2025				
2	0400		230	Solar Activity	Exists	
			231	Magnetic Storm	Expected	
	1708	McMath, Solar Flare 02/1611				
3	0400		232	Solar Activity	Exists	
			233	Magnetic Storm	Expected	
4	0400		234	Solar Activity	Exists	
			235	Magnetic Storm	Expected	
5	0400		236	Solar Activity	Exists	
			237	Magnetic Storm	Expected	
6	0400		238	Solar Activity	Exists	
			239	Magnetic Storm	Expected	
7	0400		240	Solar Activity	Exists	
9	0400		241	Strat Warming *	Exists	Over Mirny-Wilkes region movement unknown
10	0400		242	Strat Warming	Exists	Over Mirny-Wilkes region
11	0400		243	Strat Warming	Exists	Over Mirny-Wilkes region
12	0400		244	Strat Warming	Exists	Over Wilkes-McMurdo region
	0840	Athens, Solar Flare 12/0703				
13	0400		245	Strat Warming	Exists	Over Wilkes-McMurdo region
14	0400		246	Strat Warming	Exists	Over Mirny-Hallett region
15	0400		247	Strat Warming	Exists	Over Mirny-McMurdo-Hallett region
16	0400		248	Strat Warming	Exists	Wilkes-Hallett region spreading over Antarctica
17	0400		249	Magnetic Calm	Exists	
			250	Strat Warming	Exists	Wilkes-Hallett region spreading over Antarctica
18	0400		251	Strat Warming	Continues	Over Antarctica warming strongest McMurdo-Mirny regions
19	0400		252	Solar Calm	Exists	
			253	Strat Warming	Exists	Mirny-Vostok-McMurdo region
20	0400		254	Strat Warming	Exists	Vostok-Mirny region
21	0400		255	Strat Warming	Exists	Vostok-Wilkes region
22	0400		256	Strat Warming	Exists	Vostok-Wilkes region
23	0400		257	Solar Activity	Exists	Flares
			258	Strat Warming	Exists	Near Vostok
24	0400		259	Solar Activity	Exists	
			260	Strat Warming	Exists	Vostok region
25	0400		261	Solar Activity	Exists	
			262	Strat Warming	Exists	Wilkes-Mirny-Vostok region
26	0400		263	Strat Warming	Exists	Vostok-McMurdo region
27	0400		264	Strat Warming	Exists	McMurdo spreading over Antarctica
28	0400		265	Strat Warming	Exists	Antarctica
29	0400		266	Strat Warming	Exists	Antarctica
30	0400		267	Strat Warming	Exists	Antarctica
31	0400		268	Strat Warming	Exists	Antarctica

* Strat = Stratospheric